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United States
Department of
Agriculture

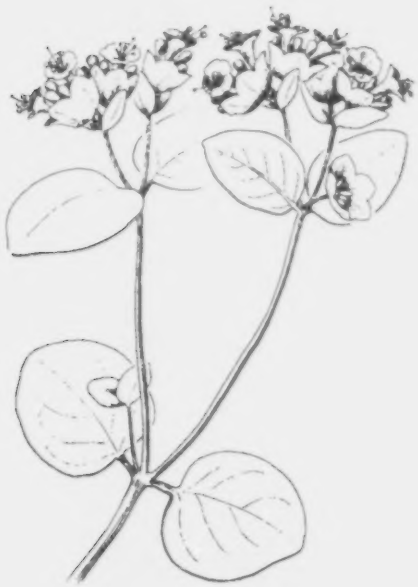
Forest
Service

Intermountain
Region

Ogden, Utah

## IDAHO and WYOMING

# Endangered And Sensitive Plant Field Guide



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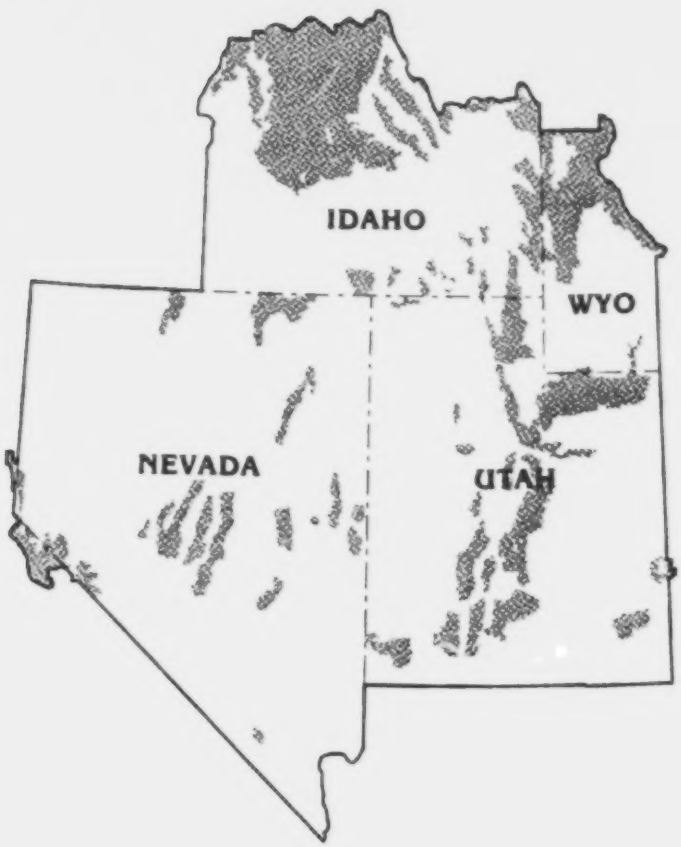
# IDAHO AND WYOMING

## Endangered and Sensitive Plant Field Guide

USDA Forest Service
Intermountain Region

## INTERMOUNTAIN REGION



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## INTRODUCTION

In May 1988, the Regional Office (RO) conducted a Threatened, Endangered, and Sensitive (TES) Species Activity Review to determine the TES program status. The review findings, recommendations, and selected alternative were approved by the Regional Forester (RF) on November 23, 1988.

The alternative selected advocates an incremental approach to increasing the Regional TES species program. It will increase the proactive activity regarding selected priority species and programs without seriously affecting other ongoing programs.

In early March 1989 the RF approved the TES Species Action Plan that identifies the specific tasks needed to implement the selected alternative from the Regional Activity Review.

This field guide was prepared as part of two actions identified in the Action Plan. 1) Increase training and education efforts; and 2) Increase awareness both internally and externally.

Other recently completed documents for the TES plant program are 1) The TES Plant Program Action Plan, January 6, 1989; and 2) the R-4 Sensitive Plant Handbook, September 1988. These documents provide management and action strategies and policy to implement the 2670 Manual direction. Copies are on file in the Forest and District offices. Additional copies can be obtained from Duane Atwood in the Regional Office.

Project clearances should be conducted for all R-4 TES species. This guide should be of value in assisting with plant identification. When TES species are located in a proposed project area, identification should be verified by a professional botanist. R-4 policy and details on project clearances are covered in Chapter 1 of The Sensitive Plant Handbook.

This guide was arranged in a 3-ring binder style to facilitate additions and deletions as new information warrants changes. The TES plant list updates will be made by the Regional Office as needed and will be mailed to the appropriate field offices. Editorial comments are welcome.

Illustrations, with diagnostic field characters, are included for each species. Photographs of the species and their habitat are included for some. Photos are needed for the remaining species. Summary data on each species status, habitat, global distribution, state distribution by county, land ownership, Forest(s) distribution, etc. are also included.

More detailed species data will be provided to the Forests upon completion of the Herbarium search currently underway. These data will be distributed early in FY 90.

More detailed information on keys to the species and technical descriptions is available. For the Idaho Forest (north of the Snake River plains) refer to Vascular Plants of the Pacific Northwest (Hitchcock, et al. 1969). For the Great Basin area refer to Intermountain Flora Vol. 1, 4 & 6, (Conquist et al. 1972, 1977, 1984). Also refer to the Flora of Idaho (Davis, 1952) or the references cited in the text. For the Bridger-Teton NF refer to Vascular Plants of Wyoming (Dorn 1988) or the references cited in the text.

The Idaho and Wyoming State Natural Heritage Programs are serving as a central repository for TES plant data in each state. Forest and District personnel involved in the plant program should work closely with the Heritage and Regional Botanists. New data should be incorporated into these and the Regional Office data bases to increase our ability to manage viable populations of these species.

For additional information on the TES plant program, consult the Regional documents listed above or contact the Regional Botanist at FTS 586-5599, (801) 625-5599, or DG to D.Atwood:R04A.

The Idaho Heritage botanist is Bob Moseley; he can be reached at (208) 334-3402. The Wyoming Heritage Botanist is Hollis Marriott; she can be reached at (307) 776-3441.

## ACKNOWLEDGEMENTS

Completion of this field guide was made possible as a result of contributions from several individuals and organizations. Information for the text came mainly from the Wyoming and Idaho State Natural Heritage Programs, Forest Service Regional Office files and the various state floras. It was compiled by Duane Atwood, Joyce Stoddard and Frank Smith. Bob Moseley provided valuable help in providing data and in reviewing the manuscript. Species distribution data were plotted by Machel Woolsey and Liz Branscome. Ralene Maw, Glenna Wright, Holly Vandre and Bernice Hampton provided valuable help in typing the text. Jim Barney and Happy Pont also provided valuable help in the final stages of preparation. Joyce Stoddard produced the camera ready copy for printing. Her assistance was invaluable in producing the final product. We wish to thank Kaye H. Thorne for original line drawings of several key taxa, as noted in the illustration credits. Several individuals provided photographs and credit is acknowledged in the text by each photograph. Competion of this guide was possible as a result of Congressional earmarked dollars for the TES plant program.Permission for use of illustrations was granted from the following sources acknowledged below:

**Illustration Credits**

Permission was granted to use illustrations from or art work was done by the following:

Kaye H. Thorne, Brigham Young University, Provo, Utah

*Chrysothamus parryi* ssp. *montanus*
*Descurainia torulosa*
*Draba borealis*
*Draba daviesiae*
*Draba trichocarpa*
*Eriogonum meledonum*
*Lupinus cusickii* var. *cusickii*
*Saussurea webberii*
*Saxifraga bryophora* var. *tobiasiae*
*Thlaspi aileeniae*
*Tofieldia glutinosa* var. *absona*

Noel Holmgren, Brittonia editor

*Astragalus schultzorum*
*Cymopterus davisii*
*Cymopterus douglasii*
*Douglasia idahoensis*
*Primula alcalina*

Cronquist, A.H. et al. 1984. Intermountain Flora. Volumes 4. The New York Botanical Garden.

*Castilleja christii*

Hitchcock, C.L. et al. 1969. Vascular Plants of the Pacific Northwest. Volumes 1-5. University of Washington press, Seattle, WA.

All other illustrations.

## DEFINITIONS AND CODES

FEDERAL STATUS (FR 50, number 188:39526-39527. 1985)

E Endangered - taxa formally listed as endangered.

T Threatened (none in Idaho or Wyoming) - Taxa formally listed as threatened.

P Proposed E or T (none in Region 4) - Taxa proposed to be formally listed as endangered or threatened

C1 Notice of Review, Category 1 (substantial biological information on file to support the appropriateness of proposing to list as endangered or threatened).

C2 Notice of Review, Category 2 (current information indicates that proposing to list as endangered or threatened is possible. Appropriate, but substantial biological information is not on file to support an immediate rulemaking).

C2* Category 2, and the taxon is possibly extinct.

3A Taxa for which the USFWS has persuasive evidence of extinction.

3B Names that, on the basis of current taxomonic understanding, do not represent taxa meeting the Endangered Species Act's definition of 'species.'

3C Taxa that have proven to be more abundant or widespread than was previously believed, and/or those that are not subject to any identifiable threat.

FOREST SERVICE
S = A sensitive plant species, subspecies, or variety for which the Regional Forester has determined that there is a concern for the species viability within a state, as evidenced by a significant current or predicted downward trend in populations or habitat. This includes federal candidates (C1, C2, and most 3C) and federally proposed species.

STATE NATURAL HERITAGE RANKS

GLOBAL RANK

G1 Critically imperiled globally because of extreme rarity (5 or fewer occurrences, or very few remaining individuals), or because of some factor of its biology making it especially vulnerable to extinction. (Critically endangered throughout range).

G2 Imperiled globally because of rarity (6 to 20 occurrences) or because of other factors demonstrably making it very vulnerable to extinction throughout its range. (Endangered throughout range).

G3 Either very rare and local throughout its range or found locally (even abundant at some of its locations) in a restricted range, or because of other factors making it vulnerable to extinction throughout its range; in the range of 21 to 100 occurrences (threatened throughout range).

G4 Apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery.

G5 Demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.

GU Possibly in peril range-wide, but status uncertain; more information needed.

GH Historically known; may be rediscovered.

GX Believed to be extinct throughout range; historical records only, continue search.

STATE RANK

S1 Critically imperiled in the state because of extreme rarity (5 or fewer occurrences, or very few remaining individuals), or because of some factor of its biology making it especially vulnerable to extirpation from the state (critically endangered in state).

S2 Imperiled in the state because of rarity (6 to 20 occurrences), or because of other factors demonstrably making it very vulnerable to extirpation from the state (endangered in state).

S3 Rare in the state (on the order of 20+ occurrences (threatened in state)).

SU Possibly in peril in the state, but status uncertain; more information needed.

SH Historically known in the state; may be rediscovered.

SX Apparently extirpated from the state.

IDAHO NATIVE PLANT SOCIETY STATUS

SP1 State Priority 1. A taxon in danger of becoming extinct or extirpated from Idaho in the foreseeable future if identifiable factors contributing to its decline continue to operate; these are taxa whose populations are present only at critically low levels or whose habitats have been degraded or depleted to a significant degree.

SP2 State Priority 2. A taxon likely to be classified as Priority 1 within the foreseeable future in Idaho, if factors contributing to this population decline or habitat degradation or loss continue.

SL Sensitive list. A taxon with small population or localized distributions within Idaho that presently do not meet the criteria for classification as Priority 1 or 2, but whose populations and habitats may be jeopardized if current land use practices continue.

ML Monitor list. Taxa that are common within a limited range as well as those taxa which are uncommon, but have no identifiable threat (for example, certain alpine taxa).

RL Review list. Taxa which may be of conservation concern, but for which we have insufficient date upon which to base a recommendation regarding their appropriate classification.

PC1 & PC2 Proposed changes at the Idaho TES plant workshop, February 1989.

## IDAHO & WYOMING
## Endangered, Threatened and Sensitive Plant List

| Scientific Name | Common Name | Distribution by Forest | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | B | BT | CA | CH | P | SAL | SAW | TA |
| *Agoseris lackschewitzii* | Pink agoseris | | | | | | y | | y |
| *Allium aaseae* | Aase's onion | y | | | | | | | |
| *Allium madidum* | Swamp onion | | | | | y | | | |
| *Allium tolmiei* var. *persimile* | Tolmie's onion | y | | | | y | | | |
| *Allium validum* | Tall swamp onion | y | | | | y | | | |
| *Allotropa virgata* | Candystick | | | | | y | | | |
| *Androsace chamaejasme* var. *carinata* | Sweet-flowered rock jasmine | | ? | | | | | | |
| *Astragalus amblytropis* | Challis milkvetch | | | | y | | y | | |
| *Astragalus amnis-amissi* | Lost River milkvetch | | | | y | | y | | |
| *Astragalus anserinus* | Goose Creek milkvetch | | | | | | | ? | |
| *Astragalus aquilonius* | Lemhi milkvetch | | | | y | | y | | |
| *Astragalus gilviflorus* | Plains milkvetch | | | | | | y | | ? |
| *Astragalus leptaleus* | Park milkvetch | | | | y | | | | |
| *Astragalus paysonii* | Payson's milkvetch | | y | | | | | | |
| *Astragalus scaphoides* | Bitterroot milkvetch | | | y | | | y | | |
| *Astragalus shultziorum* | Shultz's milkvetch | | y | | | | | | |
| *Astragalus vexilliflexus* var. *nubilus* | White Cloud milkvetch | | | | | | | y | |

FOREST DISTRIBUTION B = Boise, BT = Bridger-Teton, CA = Caribou, CH = Challis, P = Payette, SAL = Salmon, SAW = Sawtooth, TA = Targhee.

FOREST PRESENCE y = Yes (known to occur), ? = Possible (suspected to occur).

| Scientific Name | Common Name | Distribution by Forest | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | B | BT | CA | CH | P | SAL | SAW | TA |
| *Calamagrostis tweedyi* | Cascade reedgrass<br>Tweedy's reedgrass | | | | | y | | | |
| *Carex aenea* | Bronze sedge | | | | | y | | | y |
| *Carex buxbaumii* | Buxbaum's sedge | | | | | | | y | y |
| *Carex straminiformis* | Mt. Shasta sedge | | | | y | | y | y | |
| *Castilleja christii* | Christ's Indian paintbrush | | | | | | | y | |
| *Castilleja oresbia* | Pale Wallowa Indian paintbrush<br>Oresby Indian paintbrush | | | | | y | | | |
| *Ceanothus prostratus* | Mahala-mat-ceanothus | | | | | ? | | | |
| *Chrysothamnus parryi* ssp. *montanus* | Centennial rabbitbrush | | | | | | | | y |
| *Claytonia lanceolata* var. *flava* | Yellow spring-beauty | | | | | | | | ? |
| *Cryptantha simulans* | Pinewood cryptantha | y | | | | | | | |
| *Cymopterus davisii* | Davis' wavewing | | | | | | | y | |
| *Cymopterus douglassii* | Douglass' wavewing | | | | y | | y | | y |
| *Descurainia torulosa* | Wyoming tansymustard | | ? | | | | | | |
| *Douglasia idahoensis* | Idaho douglasia | | | | | ? | | | |
| *Draba borealis* | Boreal draba | | y | | | | | | |
| *Draba daviesiae* | Davies' whitlow-grass | | | | y | | | y | |
| *Draba trichocarpa* | Stanley's whitlow-grass | | | | ? | | | y | |
| *Elaeagnus commutata* | American silverberry | | | | | | | | y |
| *Epipactis gigantea* | Giant helleborine | y | | | y | y | y | y | ? |
| *Erigeron radicatus* | Taprooted fleabane | | | | y | | y | | y |

| Scientific Name | Common Name | Distribution by Forest | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | B | BT | CA | CH | P | SAL | SAW | TA |
| *Eriogonum meledonum* | Guardian buckwheat | | | | y | | | y | |
| *Gentiana propinqua* | Four-parted gentian | | | | y | | | | y |
| *Gentianella tenella* | Slender gentian | | | | y | | | | |
| *Hackelia davisii* | Davis' stickseed | | | | y | | y | | |
| *Halimolobos perplexa* var. *lemhiensis* | Puzzling halimolobos | y | | | y | | y | | |
| *Halimolobos perplexa* var. *perplexa* | Puzzling halimolobos | | | | | y | | | |
| *Haplopappus aberrans* | Idaho goldenweed | y | | | y | | | y | |
| *Haplopappus insecticruris* | Bugleg goldenweed | | | | | | | y | |
| *Haplopappus radiatus* | Radiate goldenrod<br>Snake River goldenweed | | | | | ? | | | |
| *Hydrophyllum occidentale* var. *watsonii* | Western waterleaf | y | | | | | | | |
| *Lomatium rollinsii* | Rollin's desert parsley | | | | | ? | | | |
| *Lupinus cusickii* var. *cusickii* | Cusick's lupine | | | | | ? | | | |
| *Machaeranthera laetevirens* | Vivid green aster | | | | y | | | y | |
| *Mirabilis macfarlanei* | MacFarlane's four-o'clock | | | | | ? | | | |
| *Oxytropis besseyi* var. *salmonensis* | Challis crazyweed | | | | y | | | | |
| *Papaver kluanense* | Arctic poppy | | | | y | | | | y |
| *Parnassia kotzebuei* var. *kotzebuei* | Kotzebue's grass-of-parnassus | | | | y | | | | |
| *Penstemon elegantulus* | Lovely penstemon<br>Elegant penstemon | | | | | y | | | |

| Scientific Name | Common Name | Distribution by Forest | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | B | BT | CA | CH | P | SAL | SAW | TA |
| *Penstemon idahoensis* | Idaho penstemon | | | | | | | y | |
| *Penstemon lemhiensis* | Lemhi penstemon | | | | | | y | | |
| *Phacelia lyallii* | Lyall's phacelia | | | | | | y | | |
| *Physaria didymocarpa* var. *lyrata* | Salmon twin bladderpod | | | | | | ? | | |
| *Primula alcalina* | Alkali primrose | | | | | | | | y |
| *Primula wilcoxiana* | Wilcox's primrose | y | | | | | | | |
| *Salix candida* | Hoary willow | | | | | | | | y |
| *Salix farriae* | Farr's willow | | | | y | | | | |
| *Saussurea webberii* | Weber's saussurea | | y | | | | | | |
| *Saxifraga adscendens* var. *oregonensis* | Wedge-leaf saxifrage | | | | y | | | | |
| *Saxifraga bryophora* var. *tobiasiae* | Tobias' saxifrage | | | | | y | | | |
| *Saxifraga cernua* | Nodding saxifrage | | | | y | | y | | y |
| *Saxifraga tolmiei* var. *ledifolia* | Tolmie's saxifrage | | | | | y | | | |
| *Stipa pinetorum* | Pine needlegrass | | | | y | | | | y |
| *Stipa viridula* | Green needlegrass | y | | | | | | | y |
| *Thelypodium repandum* | Wavy-leaf thelypody | | | | y | | | | |
| *Thlapsi aileeniae* | Stanley thlaspi | | | | y | | | y | |
| *Tofieldia glutinosa* var. *absona* | Out-of-tune sticky tofieldia, Tofieldia lily | | | | | y | | | |

## Status of plants by National Forest
## BOISE NATIONAL FOREST

| Scientific Name | Common Name | Heritage/ Global/ State Status | INPS Status | Federal Status |
|---|---|---|---|---|
| *Allium aaseae* | Aase's onion | G3/S3 | | C1 |
| *Allium tolmiei* var. *persimile* | Tolmie's onion | G4T2/S2 | ML | 3C |
| *Allium validum* | Tall swamp onion | G4/S1 | SL | |
| *Cryptantha simulans* | Pinewoods cryptantha | G4/S1 | SL | |
| *Douglasia idahoensis* | Idaho douglasia | G1/S1 | | C2 |
| *Epipactis gigantea* | Giant helleborine | G5/S2 | SP2 | |
| *Halimolobos perplexa* var. *lemhiensis* | Puzzling halimolobos | G4T4/S4 | ML | 3C |
| *Haplopappus aberrans* | Idaho goldenweed | G3?/S3? | ML | 3C |
| *Hydrophyllum occidentale* var. *watsonii* | Western waterleaf | G4T4/S1 | SP2 | |
| *Primula wilcoxiana* | Wilcox's primrose | G2Q/S2 | | C2 |
| *Stipa viridula* | Green needlegrass | G4/S1 | RL | |

## Status of Plants by National Forest
## BRIDGER-TETON NATIONAL FOREST

| Scientific Name | Common Name | Heritage/ Global/ State Status | Federal Status |
|---|---|---|---|
| *Androsace chamaejasme* var. *carinata* | Sweet-flowered rock jasmine | G4T4/S1 | |
| *Astragalus paysonii* | Payson milkvetch | G4/S2 | 3C |
| *Astragalus shultziorum* | Shultz milkvetch | G1/S1 | C2 |
| *Descurainia torulosa* | Wyoming tansymustard | G1/S1 | C2 |
| *Draba borealis* | Boreal draba | G4/S1 | |
| *Saussurea weberi* | Weber's saussurea | G4/S1 | 3C |

## Status of Plants by National Forest
## CHALLIS NATIONAL FOREST

| Scientific Name | Common Name | Heritage/ Global/ State Status | INPS Status | Federal Status |
|---|---|---|---|---|
| *Astragalus amblytropis* | Challis milkvetch | G3/S3 | SL | |
| *Astragalus amnis-amissi* | Lost River milkvetch | G3/S3 | SL | 3C |
| *Astragalus aquilonius* | Lemhi milkvetch | G3/S3 | | PC2 |
| *Astragalus leptaleus* | Park milkvetch | G4/S1 | SP1 | |
| *Astragalus scaphoides* | Bitteroot milkvetch | G3/S3 | SL | |
| *Astragalus vexilliflexus* var. *nubilus* | White Clouds milkvetch | G4T1/S1 | | C2 |
| *Carex straminiformis* | Mt. Shasta sedge | G4/S2 | RL | |
| *Cymopterus douglassii* | Douglass' Wavewing | G2/S2 | | PC2 |
| *Draba daviesiae* | Davies' whitlow-grass | G2/S1 | SL | |
| *Draba trichocarpa* | Stanley whitlow-grass | G2/S2 | | PC1 |
| *Epipactis gigantea* | Giant helleborine | G5/S2 | SP2 | |
| *Erigeron radicatus* | Taprooted fleabane | G2G3/S2 | ML | |
| *Eriogonum meledonum* | Guardian buckwheat | G1/S1 | SP1 | |
| *Gentiana propinqua* | Four-parted gentian | G4/S1 | ML | |
| *Gentianella tenella* | Slender gentian | G4/S1 | ML | |
| *Hackelia davisii* | Davis stickweed | G3/S3 | ML | 3C |
| *Halimolobos perplexa* var. *lemhiensis* | Puzzling halimolobos | G4T4/S4 | ML | 3C |
| *Haplopappus aberrans* | Idaho goldenweed | G3?/S3? | ML | 3C |
| *Machaeranthera laetevirens* | Vivid green aster | G1/S1 | | PC2 |

Challis National Forest Continued:

| | | | | |
|---|---|---|---|---|
| *Oxytropis besseyi* var. *salmonensis* | Challis crazy-weed | G5T3/S2 | ML | |
| *Papaver kluanense* | Arctic poppy | G4/S1 | SP1 | |
| *Parnassia kotzebuei* var. *kotzebuei* | Kotzebues grass-of-parnassus | G4T4/S1 | ML | |
| *Salix farriae* | Farr's willow | G4/S1 | SP2 | |
| *Saxifraga adscendens* var. *oregonensis* | Wedge-leaf saxifrage | G4T4/S1 | ML | |
| *Saxifraga cernua* | Nodding saxifrage | G4/S2 | RL | |
| *Stipa pinetorum* | Pine needlegrass | G4/S1 | RL | |
| *Thelypodium repandum* | Wavy-leaf thelypody | G2/S2 | | C1 |
| *Thlapsi aileeniae* | Stanley thlaspi | G3Q/S3 | ML | |

## Status of Plants by National Forest
## PAYETTE NATIONAL FOREST

| Scientific Name | Common Name | Heritage/ Global/ State Status | INPS Status | Federal Status |
|---|---|---|---|---|
| *Allium madidum* | Swamp onion | G3/S2 | SL | 3C |
| *Allium tolmiei* var. *persimile* | Tolmiei's onion | G4T2/S2 | ML | 3C |
| *Allium validum* | Tall swamp onion | G4/S1 | SL | |
| *Allotropa virgata* | Candystick | G4/S1 | SP2 | |
| *Calamagrostis tweedyi* | Cascade reedgrass | G3/S1 | SP2 | C2 |
| *Carex aenea* | Bronze sedge | G5/S2 | RL | |
| *Castilleja oresbia* | Pale wallowa paintbrush | G3/S2 | SL | 3C |
| *Ceanothus prostratus* | Mahala-mat-ceanothus | G5/S1 | SP1 | |
| *Douglasia idahoensis* | Idaho douglasia | G1/S1 | | C2 |
| *Epipactis gigantea* | Giant helliborne | G5/S2 | SP2 | |
| *Halimolobos perplexa* var. *perplexa* | Puzzling halimolobos | G4T3/S3 | ML | C2 (P3C) |
| *Haplopappus radiatus* | Radiate goldenrod; Snake River golden-weed | G2?/S1 | | C2 |
| *Lomatium rollinsii* | Rollin's desert parsley | G4/S3 | ML | C2 (P3C) |
| *Lupinus cusickii* var. *cusickii* | Cusick's lupine | G2T1/S1 | | C2 |
| *Mirabilis macfarlanei* | MacFarlane's four-o'clock | G1/S1 | | LE |
| *Penstemon elegantulus* | Lovely penstemon | G4/S1 | RL | 3C |
| *Saxifraga bryophora* var. *tobiasiae* | Tobias' saxifrage | G5T1/S1 | | PC2 |

Payette National Forest Continued:

| | | | |
|---|---|---|---|
| *Saxifraga tolmiei* var. *ledifolia* | Tolmie's saxifrage | G5T4/S4 | |
| *Tofieldia glutinosa* var. *absona* | Tofieldia lily; Out-of-tune sticky tofieldia | G5T1/S1 | PC2 |

## Status of Plants by National Forest
## SALMON NATIONAL FOREST

| Scientific Name | Common Name | Heritage/ Global/ State Status | INPS Status | Federal Status |
|---|---|---|---|---|
| *Agoseris lackschewitzii* | Pink agoseris | G2/S1 | SL | |
| *Astragalus amblytropis* | Challis milkvetch | G3/S3 | SL | |
| *Astragalus amnis-amissi* | Lost River milkvetch | G3/S3 | SL | 3C |
| *Astragalus aquilonius* | Lemhi milkvetch | G3/S3 | SP1 | PC2 |
| *Astragalus gilviflorus* | Plains milkvetch | G4/S1 | | |
| *Astragalus scaphoides* | Bitteroot milkvetch | G3/S3 | SL | |
| *Carex straminiformis* | Mt. Shasta sedge | G4/S2 | RL | |
| *Cymopterus douglassii* | Henderson spring parsley | G2/S2 | | PC2 |
| *Epipactis gigantea* | Giant helleborine | G5/S2 | SP2 | |
| *Erigeron radicatus* | Taprooted fleabane | G2G3/S2 | ML | |
| *Hackelia davisii* | Davis' stickseed | G3/S3 | ML | 3C |
| *Halimolobos perplexa* var. *lemhiensis* | Puzzling halimolobos | G4T4/S4 | ML | 3C |
| *Papaver kluanense* | Arctic poppy | G4/S1 | SP1 | |
| *Penstemon lemhiensis* | Lemhi penstemon | G3/S2 | | C2 |
| *Phacelia lyallii* | Lyall's phacelia | G2/S1 | SL | |
| *Physaria didymocarpa* var. *lyrata* | Salmon twin bladder-pod | G5T1/S1 | | C2 |
| *Saxifraga cernua* | Nodding saxifrage | G4/S2 | RL | |

## Status of Plants by National Forest
## SAWTOOTH NATIONAL FOREST

| Scientific Name | Common Name | Heritage/ Global/ State Status | INPS Status | Federal Status |
|---|---|---|---|---|
| *Astragalus anserinus* | Goose Creek milkvetch | G2/S1 | | C2 |
| *Astragalus vexilliflexus* var. *nubilus* | White Cloud's milkvetch | G4T1/S1 | | C2 |
| *Carex buxbaumii* | Buxbaum's sedge | G5/S1 | SL | |
| *Carex straminiformis* | Mt. Shasta sedge | G4/S2 | RL | |
| *Castilleja christii* | Christ Indian paintbrush | G1/S1 | | C1 |
| *Cymopterus davisii* | Davis biscuitroot | G1/S1 | | PC2 |
| *Draba daviesiae* | Davies' whitlow-grass | G2/S1 | SL | |
| *Epipactis gigantea* | Giant helleborine | G5/S2 | | |
| *Draba trichocarpa* | Stanley whitlow-grass | G2/S2 | | PC1 |
| *Eriogonum meledonum* | Guardian buckwheat | G1/S1 | SP1 | |
| *Haplopappus aberrans* | Idaho goldenweed | G3?/S3? | ML | 3C |
| *Haplopappus insecticruris* | Wholeleaf goldenweed | G3/S3 | | C2 |
| *Machaeranthera laetevirens* | Vivid green aster | G1/S1 | | PC2 |
| *Penstemon idahoensis* | Idaho penstemon | G1/S1 | | PC2 |
| *Thlapsi aileeniae* | Stanley thlaspi | G3Q/S3 | ML | |

## Status of Plants by National Forest
## TARGHEE NATIONAL FOREST

| Scientific Name | Common Name | Heritage/ Global/ State Status | INPS Status | Federal Status |
|---|---|---|---|---|
| *Agoseris lackschewitzii* | Pink agoseris | G2/S1 | SL | |
| *Astragalus gilviflorus* | Plains milkvetch | G4/S1 | SP1 | |
| *Astragalus paysonii* | Payson's milkvetch | G4/S2 | | 3C |
| *Carex aenea* | Bronze sedge | G5/S2 | RL | |
| *Carex buxbaumii* | Buxbaum's sedge | G5/S1 | SL | |
| *Chrysothamnus parryi* ssp. *montanus* | Centennial rabbitbrush | G5T1/S1 | | PC2 |
| *Claytonia lanceolata* var. *flava* | Yellow springbeauty | G5T1/S1 | | C2 |
| *Cymopterus douglassii* | Douglass wavewing | G2/S2 | | PC2 |
| *Elaeagnus commutata* | American silverberry | G5/S3 | ML | |
| *Epipactis gigantea* | Giant helleborine | G5/S2 | | |
| *Erigeron radicatus* | Taprooted fleabane | G2G3/S2 | ML | |
| *Gentiana propinqua* | Four-parted gentian | G4/S1 | ML | |
| *Papaver kluanense* | Arctic poppy | G4/S1 | SP1 | |
| *Primula alcalina* | Alkali primrose | G1/S1 | | PC2 |
| *Salix candida* | Hoary willow | G5/S1 | SL | |
| *Saxifraga cernua* | Nodding saxifrage | G4/S2 | RL | |
| *Stipa pinetorum* | Pine needlegrass | G4/S1 | RL | |
| *Stipa viridula* | Green needlegrass | G4/S1 | RL | |

## SPECIES BY HABITAT TYPE

**Alpine**

*Astragalus shultziorum*
*Astragalus vexilliflexus* var. *nubilus*
*Carex straminiformis*
*Cymopterus davisii*
*Erigeron radicatus*
*Papaver kluanense*
*Parnassia kotzebuei* var. *kotzebuei*
*Phacelia lyallii*
*Saussurea webberii*
*Saxifraga adscendens* var. *oregonensis*

**Bitterbrush/sagebrush**

*Allium aaseae*

**Bogs**

*Carex buxbaumii*
*Salix candida*
*Tofieldia glutinosa* var. *absona*

**High Rocky Slopes**

*Chrysothamnus parryi* ssp. *montanus*
*Descurainia torulosa*
*Draba borealis*
*Draba daviesiae*
*Saxifraga bryophora* var. *tobiaseae*
*Stipa pinetorum*

**Lodgepole Pine**

*Astragalus paysonii*

**Meadows**

*Claytonia lanceolata* var. *flava*
*Gentiana propinqua*
*Haplopappus insecticruris*
*Tofieldia glutinosa* var. *absona*

**Moist Forests**

*Allotropa virgata*

**Mountain Brush**

*Hydrophyllum occidentale* var. *watsonii*

**Open Grassy Sites**

*Lomatium rollinsii*
*Mirabilis macfarlanei*
*Penstemon elegantulus*
*Penstemon lemhiensis*
*Saussurea weberi*
*Saxifraga bryophora* var. *tobiasiae*
*Stipa viridula*

**Open Ponderosa Pine**

*Cryptantha simulans*
*Halimolobos perplexa* var. *perplexa*
*Penstemon lemhiensis*

**Pinyon-juniper**

*Astragalus anserinus*

**Juniper-mountainbrush**

*Penstemon idahoensis*

**Ponderosa Pine/shrub**

*Ceanothus prostratus*

**Rock Crevices And Ledges**

*Androsace chamaejasme* var. *carinata*
*Astragalus amnis-amissi*
*Halimolobos perplexa* var. *perplexa*
*Haplopappus aberrans*
*Papaver kluanense*
*Parnassia kotzebuei* var. *kotzebuei*
*Saxifraga adscendens* var. *oregonensis*
*Saxifraga cernua*
*Phacelia lyallii*
*Saxifraga tolmiei* var. *ledifolia*

**Sagebrush/grass**

*Allium tolmiei* var. *persimile*
*Astragalus amblytropis*
*Astragalus aquilonius*

*Astragalus gilviflorus*
*Astragalus scaphoides*
*Castilleja oresbia*
*Draba trichocarpa*
*Haplopappus insecticruris*
*Lupinus cusickii* var. *cusickii*
*Machaeranthera laetevirens*
*Oxytropis besseyi* var. *salmonensis*
*Primula wilcoxiana*
*Stipa pinetorum*
*Stipa viridula*
*Thlaspi aileeniae*

**Seeps**

*Epipactis gigantea*

**Shadescale**

*Astragalus amblytropis*
*Astragalus aquilonius*
*Astragalus gilviflorus*
*Oxytropis besseyi* var. *salmonensis*

**Springs**

*Epipactis gigantea*

**Streambanks**

*Astragalus leptaleus*
*Carex aenea*
*Carex buxbaumii*
*Elaeagnus commutata*
*Gentiana propinqua*
*Salix farriae*
*Tofieldia glutinosa* var. *absona*

**Subalpine**

*Astragalus vexilliflexus* var. *nubilus*
*Calamagrostis tweedyi*
*Carex straminiformis*
*Castilleja christii*
*Cymopterus davisii*
*Douglasia idahoensis*
*Draba daviesiae*
*Erigeron radicatus*
*Parnassia kotzebuei* var. *kotzebuei*
*Penstemon elegantulus*

*Phacelia lyallii*
*Saxifraga adscendens* var. *oregonensis*

**Swampy Meadows**

*Allium validum*
*Salix candida*

**Thermal Sites**

*Epipactis gigantea*

**Vernal Pools**

*Allium madidum*

**Wet Meadows**

*Agoseris lackschewitzii*
*Allium madidum*
*Astragalus leptaleus*
*Carex aenea*
*Carex buxbaumii*
*Gentianella tenella*
*Primula alcalina*
*Saxifraga cernua*
*Saxifraga tolmiei* var. *ledifolia*

## SPECIES BY SOIL TYPE

**Basalt Substrates**

*Astragalus scaphoides*
*Oxytropis besseyi* var. *salmonensis*

**Calcareous Substrates**

*Cymopterus davisii*

**Clay With Rock Pediment**

*Allium tolmiei* var. *persimile*
*Castilleja oresbia*

**Deep Humus**

*Allotropa virgata*

**Dolomtic Substrates**

*Astragalus shultziorum*
*Cympoterus douglassii*

**Granitic Substrates**

*Douglasia idahoensis*
*Draba trichocarpa*
*Erigonum meledonum*
*Halimolobos perplexa* var. *lemhiensis*
*Penstemon elegantulus*

**Limestone Substrates**

*Astragalus amnis-amissi*
*Astragalus scaphoides*
*Astragalus schultziorum*

**Quartzite Substrates**

*Papaver kluanense*

**Sandstone Substrates**

*Astragalus gilviflorus*

**Sedimentary Substrates**

*Allium aaseae*
*Primula wilcoxiana*

**Talus And Rocky Slopes**

*Astragalus amnis-amissi*
*Eriogonum meledonum*
*Hackelia davisii*
*Halimolobos perplex* var. *perplexa*
*Haplopappus aberrans*
*Haplopappus radicatus*
*Phacelia lyallii*
*Physaria didymocarpa* var. *lyrata*
*Saussurea webberii*
*Saxifraga tolmiei* var. *ledifolia*
*Thelypodium repandum*

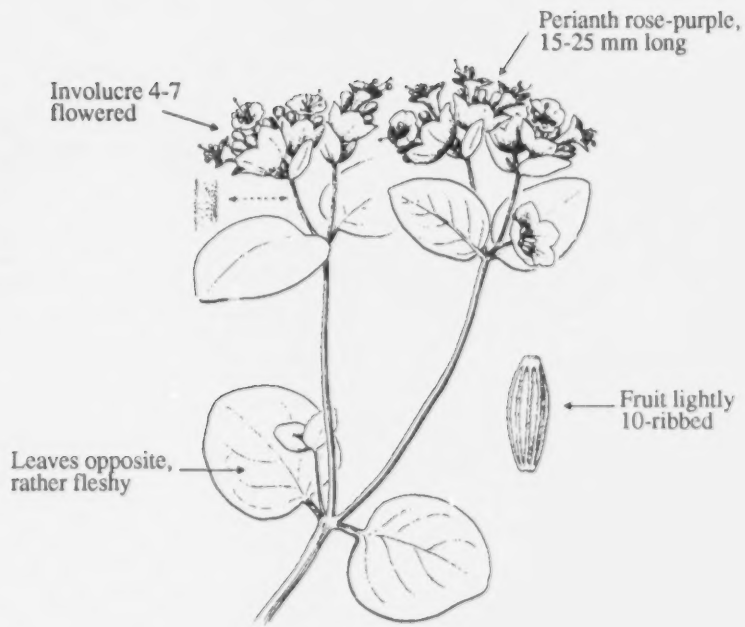
**Tuffaceous Sands**

*Astragalus anserinus*
*Penstemon idahoensis*

**Volcanic Ash**

*Astragalus amblytropis*
*Astragalus aquilonius*
*Thelypodium repandum*

## FEDERALLY LISTED PLANTS




***MIRABILIS MACFARLANEI***

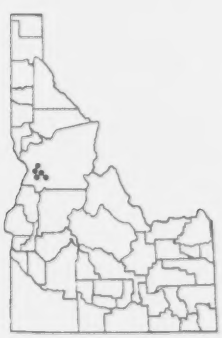
---

**Scientific Name:** *Mirabilis macfarlanei* Constance & Rollins
**Common Name:** MacFarlane's four-o'clock
**Family (common name):** Nyctaginaceae (Four o'clock Family)
**Synonyms:** None
**Global and State Rank:** G1/S1
**Federal Review Status:** LE
**Global Distribution:** Extreme northeastern Oregon and western Idaho
**State Distribution:** Idaho County
**Ownership:** USDA FS?, BLM, and private
**National Forest:** Payette?
**Habitat:** Associated with a grassland community on steep slopes with sandy soils. April-early May.

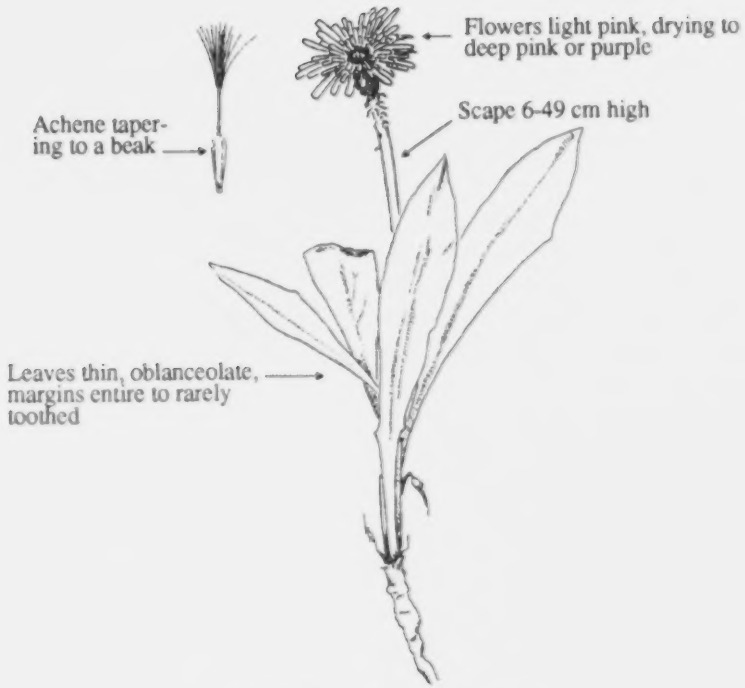
*Photo by B. Parenti*

*Photo by B. Parenti*

Species Distribution



## SENSITIVE SPECIES


Flowers light pink, drying to deep pink or purple
Scape 6-49 cm high
Achene tapering to a beak
Leaves thin, oblanceolate, margins entire to rarely toothed

*AGOSERIS LACKSCHEWITZII*

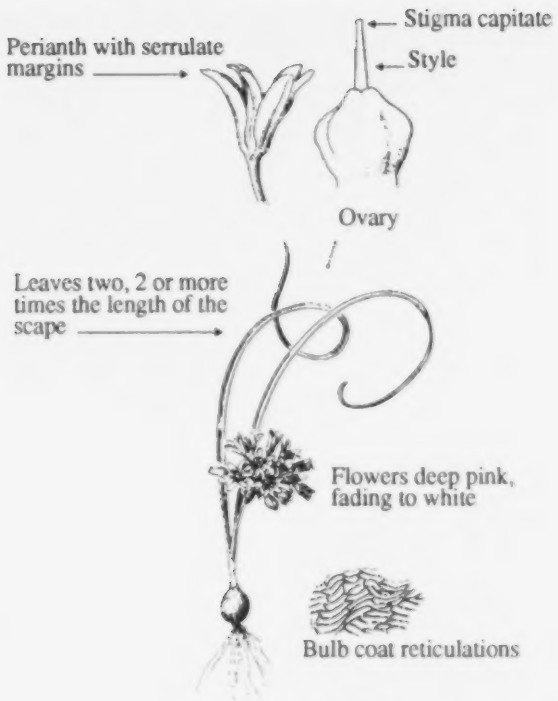
---

**Scientific Name:** *Agoseris lackschewitzii* sp. nov. in ed.
**Common Name:** Pink agoseris
**Family (common name):** Asteraceae (Aster Family)
**Synonyms:** None
**Global and State Rank:** G2/S1
**Federal Review Status:** None
**Global Distribution:** Idaho and southwestern Montana
**State Distribution:** Fremont and Lemhi counties
**Ownership:** USDA FS and BLM
**National Forest:** Salmon and Targhee
**Habitat:** Wet meadows with soil saturated throughout the growing season. Mid July-August.

*Photo by D. Henderson*

*Photo by D. Henderson*

Species
Distribution


Stigma capitate
Perianth with serrulate margins
Style
Ovary
Leaves two, 2 or more times the length of the scape
Flowers deep pink, fading to white
Bulb coat reticulations

***ALLIUM AASEAE***

---

**Scientific Name:** *Allium aaseae* Ownbey

**Common Name:** Aase's onion

**Family (common name):** Liliaceae (Lily Family)

**Synonyms:** None

**Global and State Rank:** G3/S3

**Federal Review Status:** C1

**Global Distribution:** West-central Idaho

**State Distribution:** Ada, Gem, Washington, Boise, and Elmore counties

**Ownership:** USDA FS, BLM, state, and private

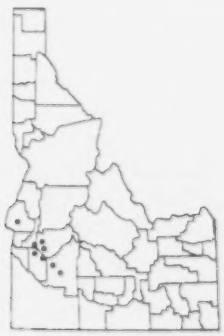
**National Forest:** Boise

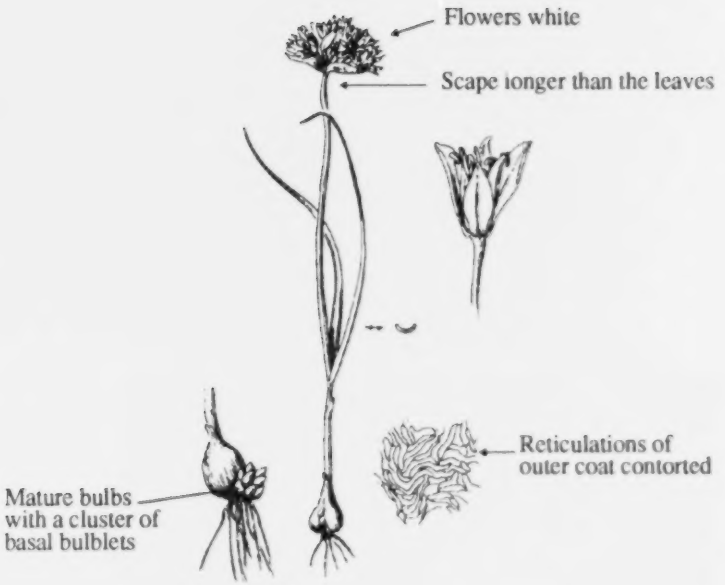
**Habitat:** Bare sedimentary soil and steep southerly exposures between 2,850 to 4,400 feet elevation growing with *Purshia/Eriogonum.* March-April.

*Photo by R. Rosentreter*

*Photo by R. Rosentreter*

Species Distribution




Flowers white
Scape longer than the leaves
Reticulations of outer coat contorted
Mature bulbs with a cluster of basal bulblets

***ALLIUM MADIDUM***

---

**Scientific Name:** *Allium madidum* S. Wats.

**Common Name:** Swamp onion

**Family (common name):** Liliaceae (Lily Family)

**Synonyms:** *Allium equicaeleste* St. John

**Global and State Rank:** G3/S2

**Federal Review Status:** 3C

**Global Distribution:** Blue Mountains of eastern Oregon and western Idaho

**State Distribution:** Adams County

**Ownership:** USDA FS and private

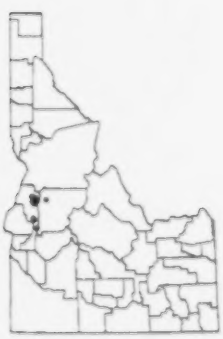
**National Forest:** Payette

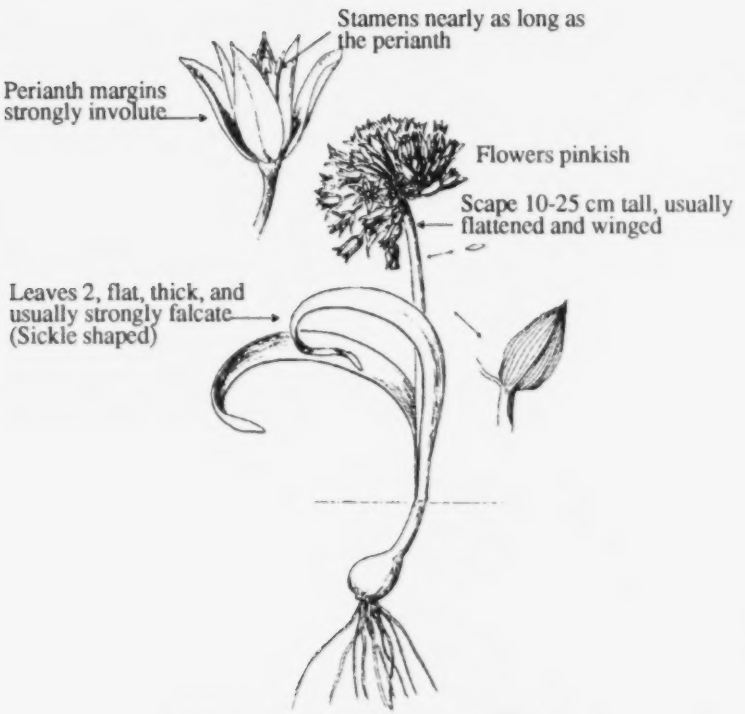
**Habitat:** Seasonally wet meadows and water courses in low ground and around vernal pools between 3,800-6,500 feet elevation. Early May-early July.

*Photo by D. Atwood*

*Photo by D. Atwood*

Species
Distribution




Stamens nearly as long as the perianth
Perianth margins strongly involute
Flowers pinkish
Scape 10-25 cm tall, usually flattened and winged
Leaves 2, flat, thick, and usually strongly falcate (Sickle shaped)

***ALLIUM TOLMIEI* var. *PERSIMILE***

---

**Scientific Name:** *Allium tolmiei* Baker ex Wats. var. *persimile* Ownbey

**Common Name:** Tolmie's onion

**Family (common name):** Liliaceae (Lily Family)

**Synonyms:** *Allium persimile* (Ownbey) Traub & Ownbey

**Global and State Rank:** G4T2/S2

**Federal Review Status:** 3C

**Global Distribution:** West-central Idaho

**State Distribution:** Adams, Gem, and Washington counties

**Ownership:** USDA FS, BLM, state, and private

**National Forest:** Boise and Payette

**Habitat:** Partly timbered or sagebrush/grass communities on rocky, gravelly, or clayey ground between 3,000 to 5,000 feet elevation. Late May-early July.

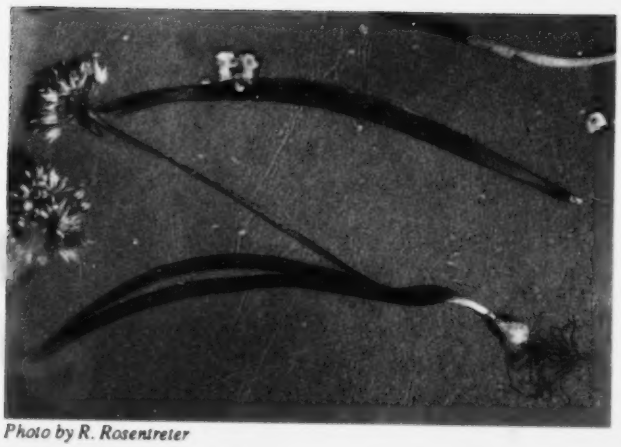
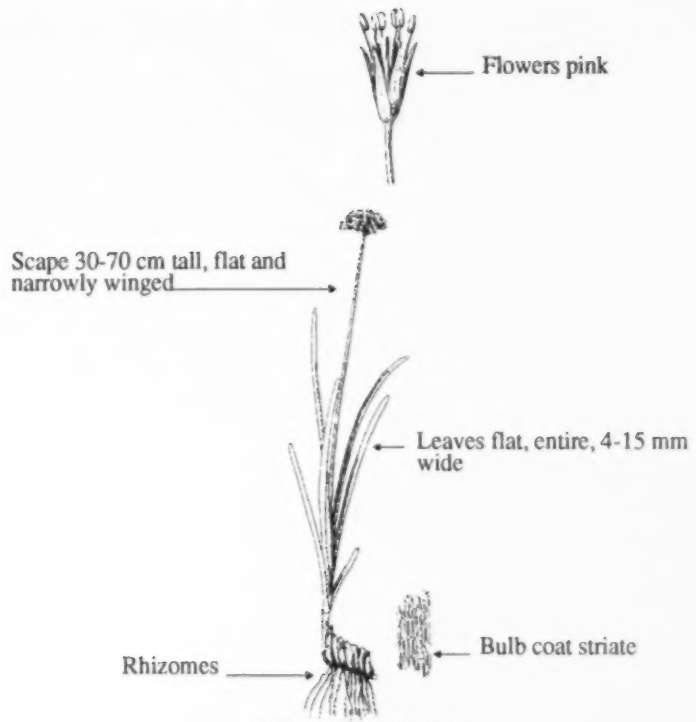


*Photo by R. Rosentreter*

*Photo by D. Atwood*

Species Distribution




***ALLIUM VALDIUM***

---

**Scientific Name:** *Allium validum* Wats.

**Common Name:** Tall swamp onion

**Family (common name):** Liliaceae (Lily Family)

**Synonyms:** None

**Global and State Rank:** G4/S1

**Federal Review Status:** None

**Global Distribution:** East side of the Cascades from British Columbia to California, east to northeast Nevada and western Idaho

**State Distribution:** Elmore and Washington Counties

**Ownership:** USDA FS

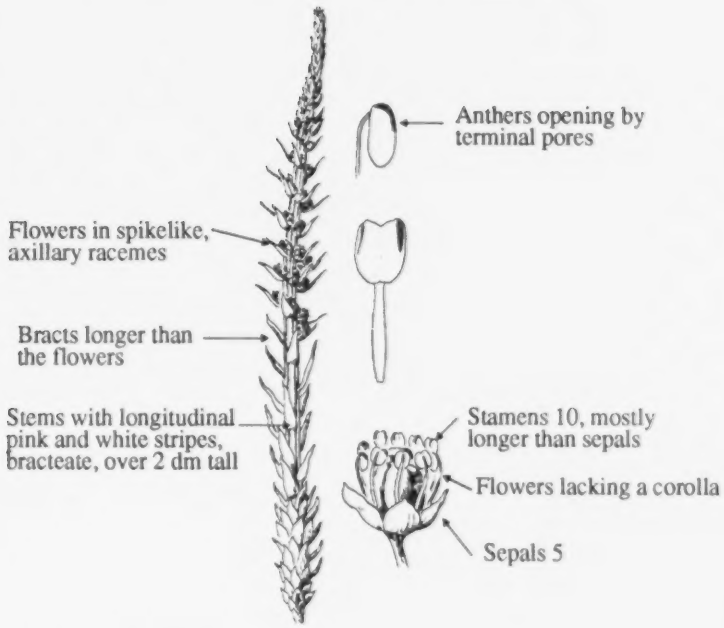
**National Forest:** Boise and Payette

**Habitat:** Swampy meadows from mid to high elevations. July.

*Photo by B. Moseley*

*Photo by B. Moseley*

Species
Distribution


Anthers opening by terminal pores
Flowers in spikelike, axillary racemes
Bracts longer than the flowers
Stems with longitudinal pink and white stripes, bracteate, over 2 dm tall
Stamens 10, mostly longer than sepals
Flowers lacking a corolla
Sepals 5

## *ALLOTROPA VIRGATA*

**Scientific Name:** *Allotropa virgata* T. and G. ex Gray

**Common Name:** Candystick

**Family (common name):** Ericaceae (Heath Family)

**Synonyms:** None

**Global and State Rank:** G4/S1

**Federal Review Status:** None

**Global Distribution:** West of Cascades from British Columbia to California. Disjunct in Idaho.

**State Distribution:** Idaho County

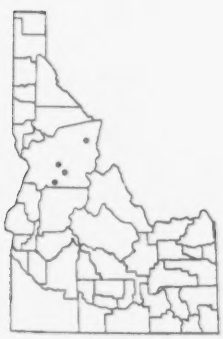
**Ownership:** USDA FS

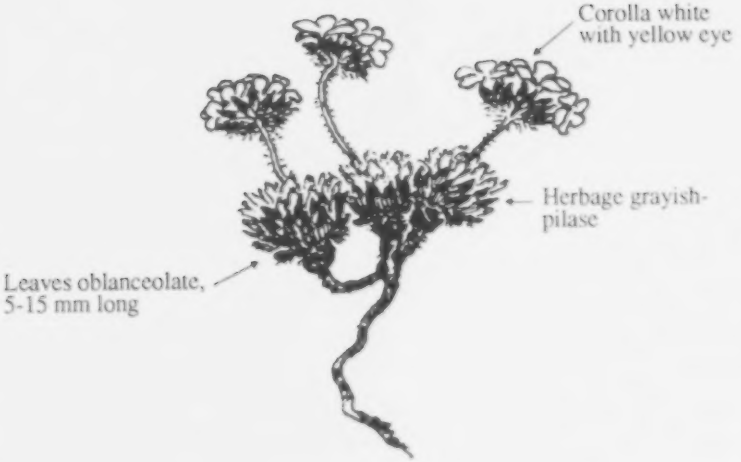
**National Forest:** Payette

**Habitat:** Shaded areas in deep humus of old growth coniferous forests. May-August.

*Photo by A. Kratz*

Species Distribution






## *ANDROSACE CHAMAEJASME* var. *CARINATA*

**Scientific Name:** *Androsace chamaejasme* Wulf. var. *carinata* (Torr.) Knuth

**Common Name:** Sweet-flowered rock jasmine

**Family (common name):** Primulaceae (Primrose Family)

**Synonyms:** *Androsace carinata* Torr., *A. chamaejasme* Wulf. ssp. *carinata* (Torr.) Hult., *A. lehmanniana* Spreng.

**Global and State Rank:** G4T4/S1

**Federal Review Status:** None

**Global Distribution:** Alaska to Wyoming

**State Distribution:** Fremont and Park counties

**Ownership:** USDA FS?

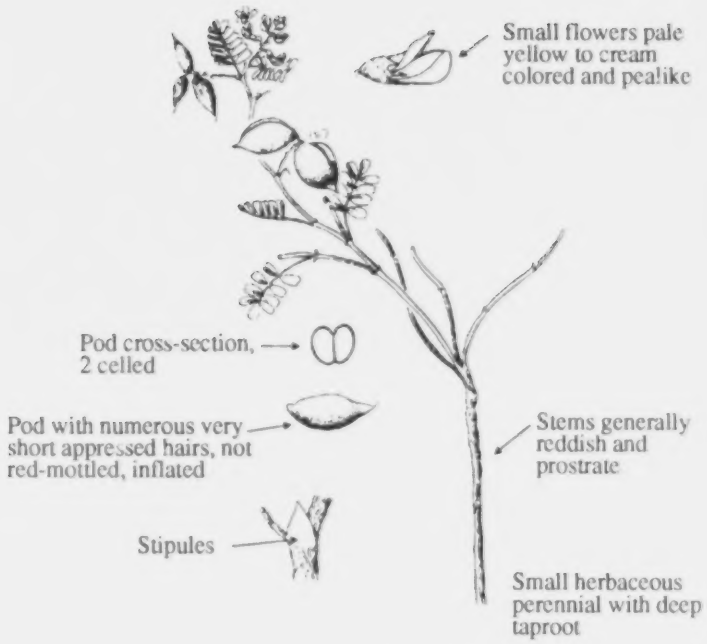
**National Forest:** Bridger-Teton?

**Habitat:** Rock crevices and slopes in mountains between 9,500 to 10,800 feet. Late May-Late July.

*Photo by H. Marriott*

*Photo by H. Marriott*

Species
Distribution


Small flowers pale yellow to cream colored and pealike
Pod cross-section, 2 celled
Pod with numerous very short appressed hairs, not red-mottled, inflated
Stipules
Stems generally reddish and prostrate
Small herbaceous perennial with deep taproot

*ASTRAGALUS AMBLYTROPIS*

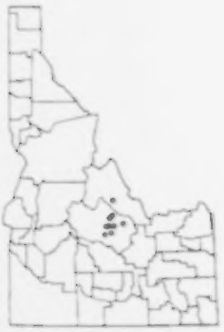
---

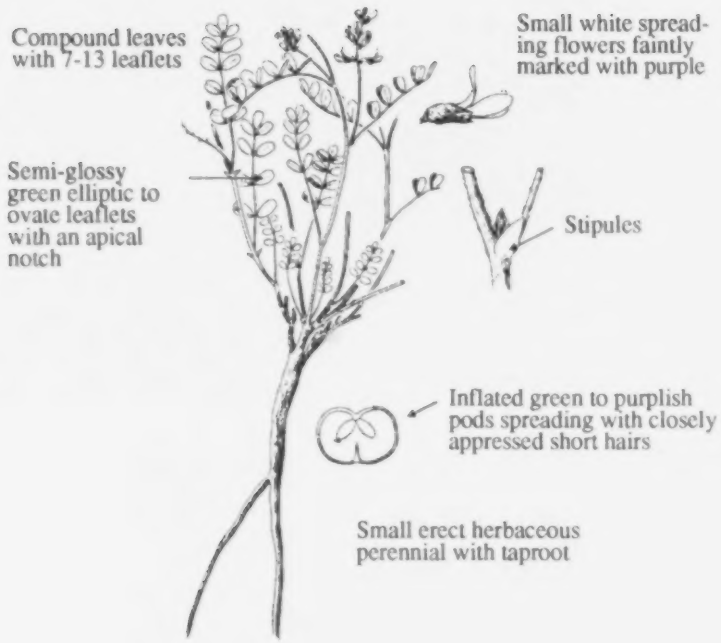
**Scientific Name:** *Astragalus amblytropis* Barneby
**Common Name:** Challis milkvetch
**Family (common name):** Fabaceae (Pea Family)
**Synonyms:** None
**Global and State Rank:** G3/S3
**Federal Review Status:** None
**Global Distribution:** Central Idaho
**State Distribution:** Custer and Lemhi counties
**Ownership:** USDA FS, BLM, state, and private
**National Forest:** Challis and Salmon
**Habitat:** Volcanic ash deposits of lower sagebrush or shadescale covered slopes. June-July.

*Photo by B. Rittenhouse*

*Photo by D. Atwood*

Species
Distribution




Compound leaves with 7-13 leaflets
Small white spreading flowers faintly marked with purple
Semi-glossy green elliptic to ovate leaflets with an apical notch
Stipules
Inflated green to purplish pods spreading with closely appressed short hairs
Small erect herbaceous perennial with taproot

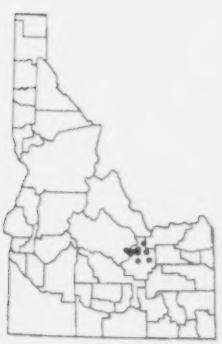
## *ASTRAGALUS AMNIS-AMISSI*

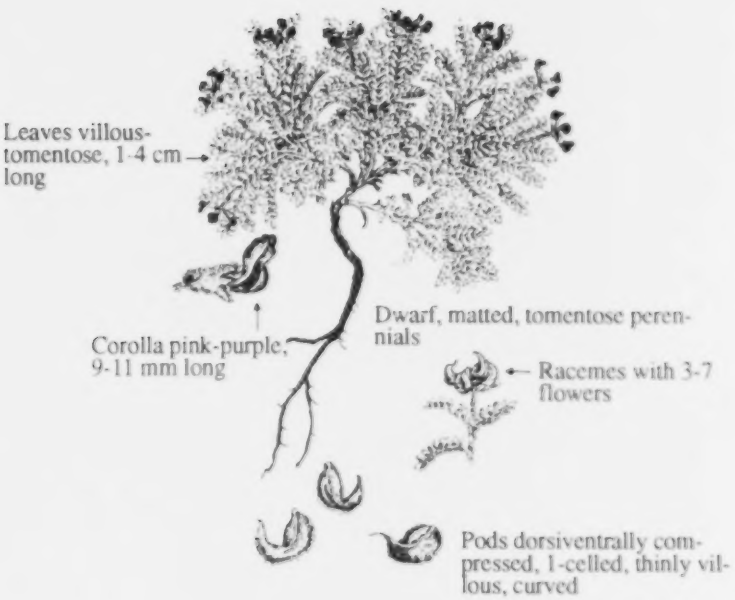
**Scientific Name:** *Astragalus amnis-amissi* Barneby
**Common Name:** Lost River milkvetch
**Family (common name):** Fabaceae (Pea Family)
**Synonyms:** None
**Global and State Rank:** G3/S3
**Federal Review Status:** 3C
**Global Distribution:** East-central Idaho
**State Distribution:** Custer and Butte counties
**Ownership:** USDS FS and BLM
**National Forest:** Challis
**Habitat:** Cracks in ledges and other similar sites on near vertical limestone cliffs, and in talus at the base of cliffs; mostly in moist, shaded areas. June-July.

*Photo by S. Brunsfeld*

*Photo by B. Moseley*

Species
Distribution




Leaves villous-tomentose, 1-4 cm long
Dwarf, matted, tomentose perennials
Corolla pink-purple, 9-11 mm long
Racemes with 3-7 flowers
Pods dorsiventrally compressed, 1-celled, thinly villous, curved

*ASTRAGALUS ANSERINUS*

---

**Scientific Name:** *Astragalus anserinus* Atwood, Goodrich, & Welsh

**Common Name:** Goose Creek milkvetch

**Family (common name):** Fabaceae (Pea Family)

**Synonyms:** None

**Global and State Rank:** G2/S1

**Federal Review Status:** C2

**Global Distribution:** Three corners of northeastern Nevada, southern Idaho, and northwestern Utah

**State Distribution:** Cassia county

**Ownership:** USDA FS?, BLM, and private

**National Forest:** Sawtooth?

**Habitat:** Barren slopes composed of white tuffaceous sand. June-July.

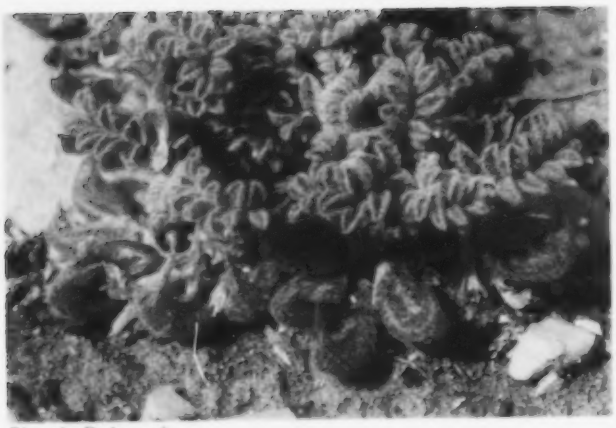
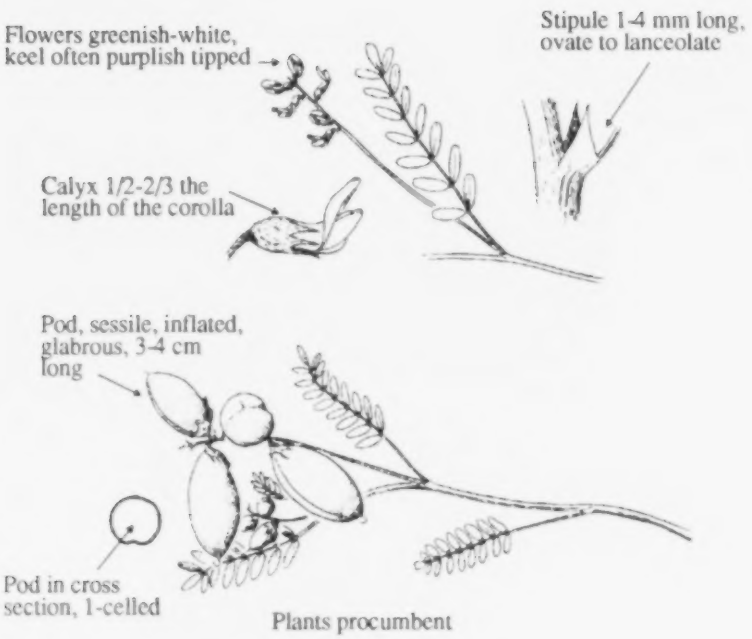


*Photo by D. Atwood*

*Photo by R. Rosentreter*

Species Distribution


Flowers greenish-white, keel often purplish tipped
Stipule 1-4 mm long, ovate to lanceolate
Calyx 1/2-2/3 the length of the corolla
Pod, sessile, inflated, glabrous, 3-4 cm long
Pod in cross section, 1-celled
Plants procumbent

***ASTRAGALUS AQUILONIUS***

---

**Scientific Name:** Astragalus aquilonius (Barneby) Barneby

**Common Name:** Lemhi milkvetch

**Family (common name):** Fabaceae (Pea Family)

**Synonyms:** Astragalus wootonii Sheld. var. aquilonius Barneby

**Global and State Rank:** G3/S3

**Federal Review Status:** PC2

**Global Distribution:** East-central Idaho

**State Distribution:** Custer, Butte, and Lemhi counties

**Ownership:** USDA FS, BLM, state, INEL, and private

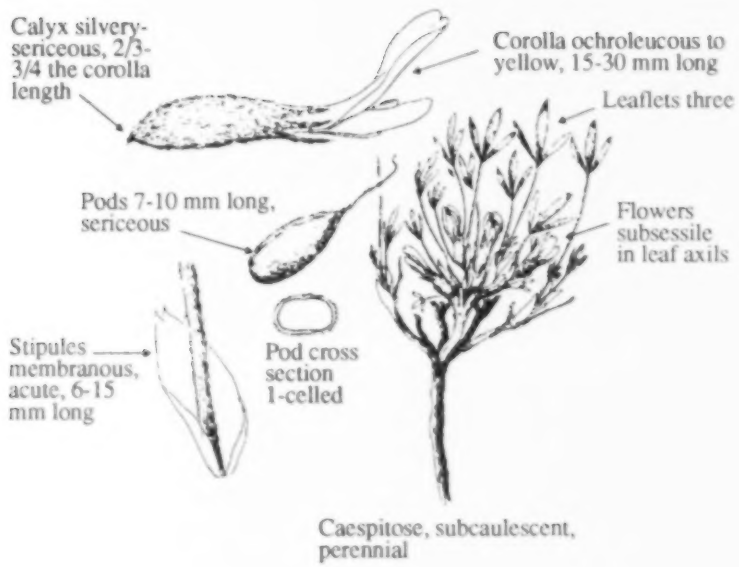
**National Forest:** Challis

**Habitat:** Generally on unstable, steepbanks, sandy washes and gullies within the shrub-steppe zone at lower elevations. May-June.

*Photo by D. Henderson*

*Photo by D. Henderson*

Species Distribution


Calyx silvery-sericeous, 2/3-3/4 the corolla length
Corolla ochroleucous to yellow, 15-30 mm long
Leaflets three
Pods 7-10 mm long, sericeous
Flowers subsessile in leaf axils
Stipules membranous, acute, 6-15 mm long
Pod cross section 1-celled
Caespitose, subcaulescent, perennial

## *ASTRAGALUS GILVIFLORUS*

**Scientific Name:** *Astragalus gilviflorus* Sheld.

**Common Name:** Plains milkvetch

**Family (common name):** Fabaceae (Pea Family)

**Synonyms:** *Astragalus triphyllus* Pursh, *Phaca caespitosa* Nutt.

**Global and State Rank:** G4/S1

**Federal Review Status:** None

**Global Distribution:** East base of the Rocky Mountains, from Montana to Colorado, east to Saskatchawan and Nebraska

**State Distribution:** Clark, Lemhi and Fremont Counties

**Ownership:** USDA FS, BLM, INEL, and private

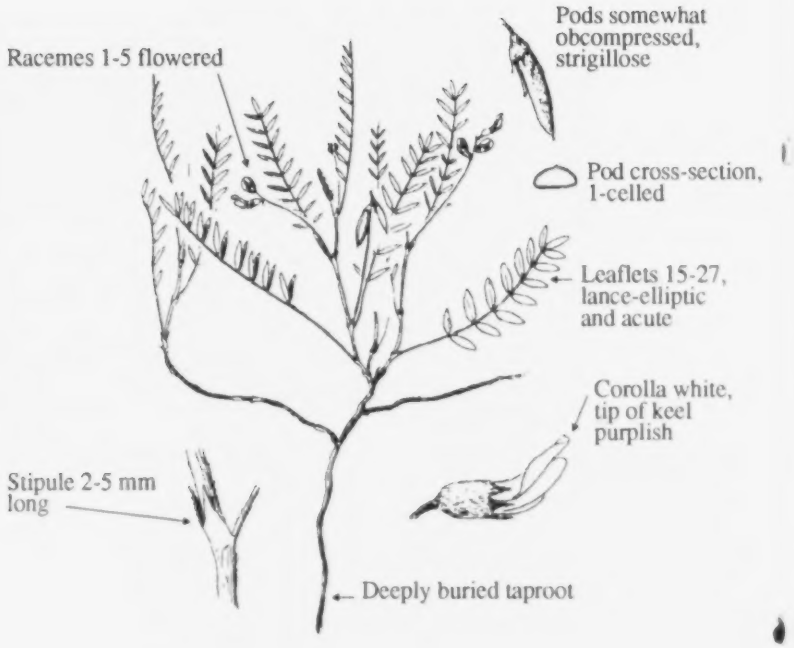
**National Forest:** Targhee? and Salmon

**Habitat:** Barren knolls, hilltops, and gullied badlands on limestone, shale, or sandstone.

*Photo by D. Henderson*

*Photo by D. Henderson*

Species Distribution


Racemes 1-5 flowered
Pods somewhat obcompressed, strigillose
Pod cross-section, 1-celled
Leaflets 15-27, lance-elliptic and acute
Corolla white, tip of keel purplish
Stipule 2-5 mm long
Deeply buried taproot

## *ASTRAGALUS LEPTALEUS*

---

**Scientific Name:** *Astragalus leptaleus* Gray

**Common Name:** Park milkvetch

**Family (common name):** Fabaceae (Pea Family)

**Synonyms:** *Phaca pauciflora* Nutt. ex T. & G., *Astragalus pauciflorus* Gray, *Tragacantha leptalea* Kuntze, Phaca leptalea Rydb.

**Global and State Rank:** G4/S1

**Federal Review Status:** None

**Global Distribution:** Western Montana to central Idaho, south in the Rocky Mountains to Colorado, and reportedly to Alberta.

**State Distribution:** Custer County

**Ownership:** USDA FS, state, and BLM

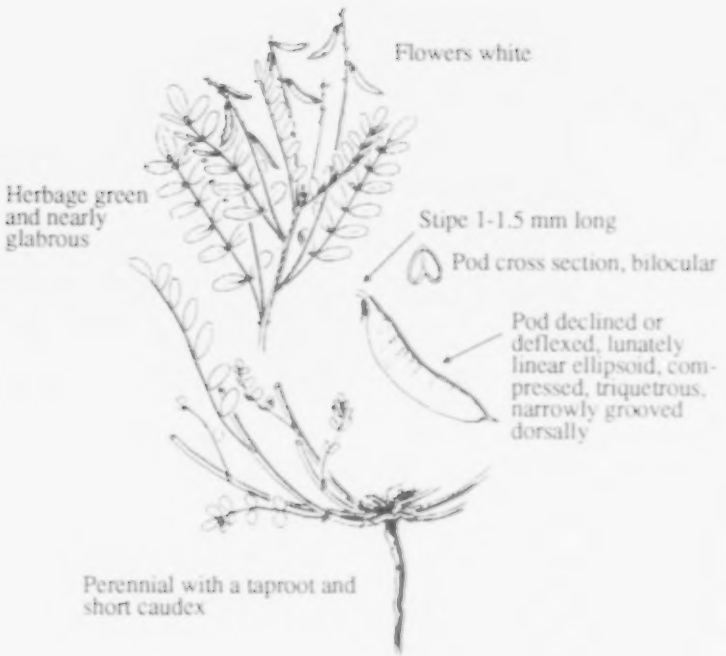
**National Forest:** Challis

**Habitat:** Moist sedge-grass meadows, swales, and hummocks at edges of mountain brooks and among streamside willows. June-September.

*Photo by D. Henderson*

*Photo by S. Caicco*

Species Distribution


Flowers white
Herbage green and nearly glabrous
Stipe 1-1.5 mm long
Pod cross section, bilocular
Pod declined or deflexed, lunately linear ellipsoid, compressed, triquetrous, narrowly grooved dorsally
Perennial with a taproot and short caudex

## *ASTRAGALUS PAYSONII*

**Scientific Name:** *Astragalus paysonii* (Rydb.) Barneby

**Common Name:** Payson's milkvetch

**Family (common name):** Fabaceae (Pea Family)

**Synonyms:** *Hamosa paysonii* Rydb.

**Global and State Rank:** G4/S2

**Federal Review Status:** 3C

**Global Distribution:** Western Wyoming; eastern and north-central Idaho

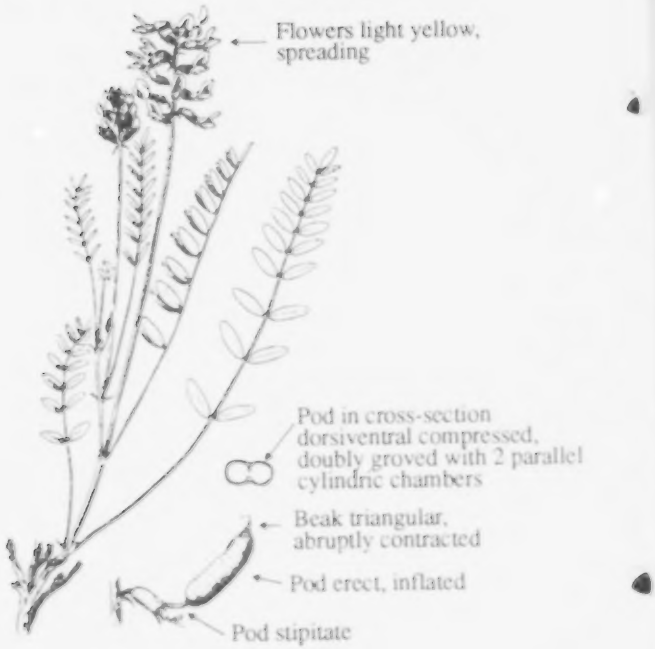
**State Distribution:** Sublette and Lincoln counties in Wyoming; Bonneville and Idaho counties in Idaho

**Ownership:** USDA FS

**National Forest:** Bridger-Teton; Caribou NF (administered by Targhee)

**Habitat:** Burned areas and other open distributed sites in the mountains between 7,160 and 9,600 feet elevation. July-August.

Species
Distribution


Flowers light yellow, spreading
Pod in cross-section dorsiventral compressed, doubly groved with 2 parallel cylindric chambers
Beak triangular, abruptly contracted
Pod erect, inflated
Pod stipitate

*ASTRAGALUS SCAPHOIDES*

---

**Scientific Name:** *Astragalus scaphoides* (Jones) Rydb.

**Common Name:** Bitterroot milkvetch

**Family (common name):** Fabaceae (Pea Family)

**Synonyms:** *Astragalus arrectus* var. *scaphoides* M.E. Jones, *A. scaphoides* Rydb., *Phacopsis scaphoides* Rydb, *Hesperomix scaphoides* Rydb.

**Global and State Rank:** G3/S3

**Federal Review Status:** None

**Global Distribution:** East-central Idaho and western Montana

**State Distribution:** Lemhi and Custer counties

**Ownership:** USDA FS, BLM, state, and private

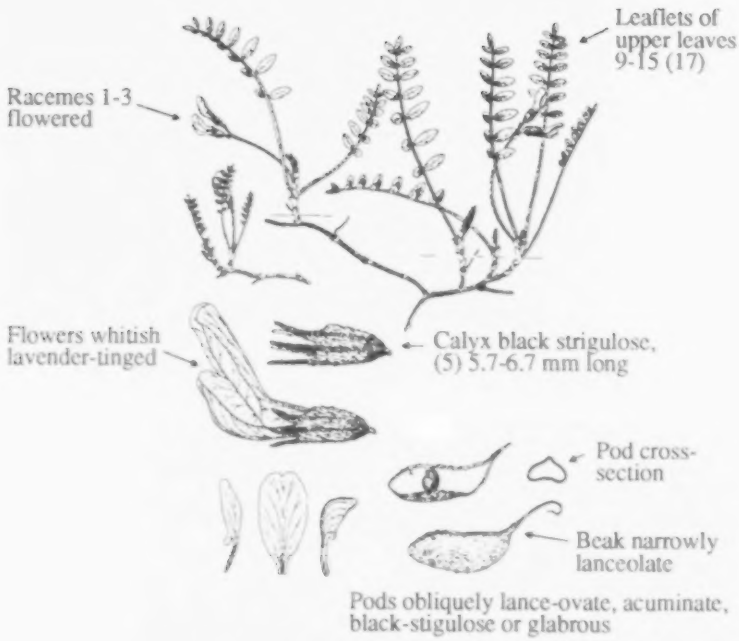
**National Forest:** Challis and Salmon

**Habitat:** Sagebrush grassland community on limestone and alluvial parent material between 4,000 to 6,500 feet elevation. June-early July.

*Photo by P. Lesica*

*Photo by P. Lesica*

Species
Distribution


Leaflets of upper leaves 9-15 (17)
Racemes 1-3 flowered
Flowers whitish lavender-tinged
Calyx black strigulose, (5) 5.7-6.7 mm long
Pod cross-section
Beak narrowly lanceolate
Pods obliquely lance-ovate, acuminate, black-stigulose or glabrous

***ASTRAGALUS SHULTZIORUM***

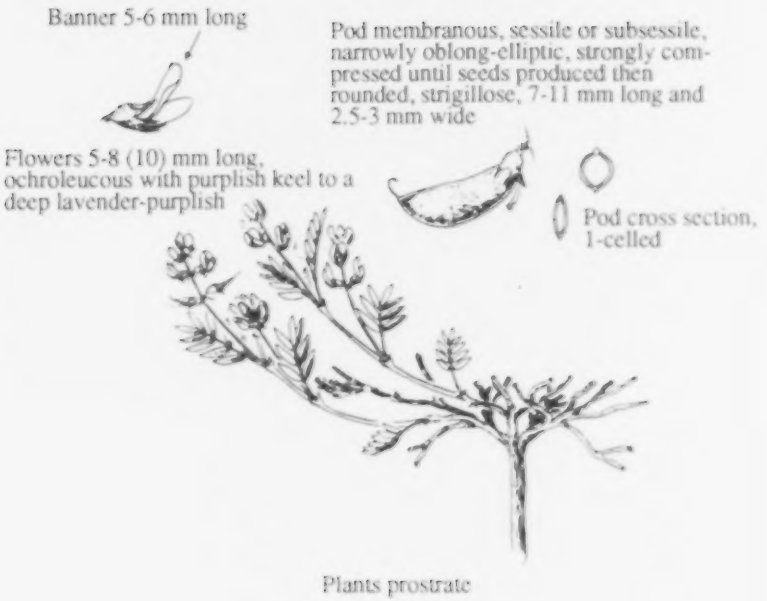
---

**Scientific Name:** *Astragalus shultziorum* Barneby
**Common Name:** Shultz's milkvetch
**Family (common name):** Fabaceae (Pea Family)
**Synonyms:** None
**Global and State Rank:** G1/S1
**Federal Review Status:** C2
**Global Distribution:** Western Wyoming
**State Distribution:** Lincoln and Teton counties
**Ownership:** USDA FS and National Park Service
**National Forest:** Bridger-Teton
**Habitat:** Alpine areas on limestone and dolomite outcrops, between 9,600 and 10,450 feet elevation. July-September.

*Photo by H. Marriott*

*Photo by H. Marriott*

Species
Distribution


Banner 5-6 mm long
Pod membranous, sessile or subsessile, narrowly oblong-elliptic, strongly compressed until seeds produced then rounded, strigillose, 7-11 mm long and 2.5-3 mm wide
Flowers 5-8 (10) mm long, ochroleucous with purplish keel to a deep lavender-purplish
Pod cross section, 1-celled
Plants prostrate

## *ASTRAGALUS VEXILLIFLEXUS* var. *NUBILUS*

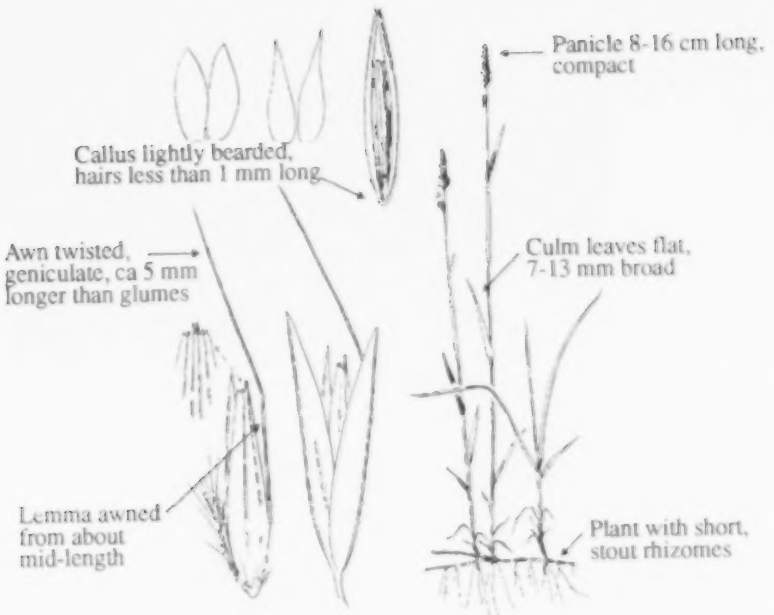
---

**Scientific Name:** *Astragalus vexilliflexus* Sheld. var. *nubilus* Barneby
**Common Name:** White Clouds milkvetch
**Family (common name):** Fabaceae (Pea Family)
**Synonyms:** None
**Global and State Rank:** G4T1/S1
**Federal Review Status:** C2
**Global Distribution:** Central Idaho
**State Distribution:** Custer County
**Ownership:** USDA FS
**National Forest:** Challis (Sawtooth NRA) and Sawtooth
**Habitat:** Subalpine and alpine areas. Scree slopes and sagebrush communities. August-September.

*Photo by D. Atwood*

*Photo by D. Atwood*

Species
Distribution


Panicle 8-16 cm long, compact
Callus lightly bearded, hairs less than 1 mm long
Awn twisted, geniculate, ca 5 mm longer than glumes
Culm leaves flat, 7-13 mm broad
Lemma awned from about mid-length
Plant with short, stout rhizomes

## *CALAMAGROSTIS TWEEDYI*

**Scientific Name:** *Calamagrostis tweedyi* (Scribner) Scribner in Vasey
**Common Name:** Cascade reedgrass or Tweedy's reedgrass
**Family (common name):** Poaceae (Grass Family)
**Synonyms:** *Deyeuxia tweedyi* Scribn.
**Global and State Rank:** G3/S1
**Federal Review Status:** C2
**Global Distribution:** Idaho, Montana, and Washington
**State Distribution:** Idaho County
**Ownership:** USDA FS
**National Forest:** Payette
**Habitat:** Subalpine slopes and moist meadows, often growing in timber. Late June-early August.

*Photo by D. Atwood*

*Photo by B. Moseley*

Species
Distribution

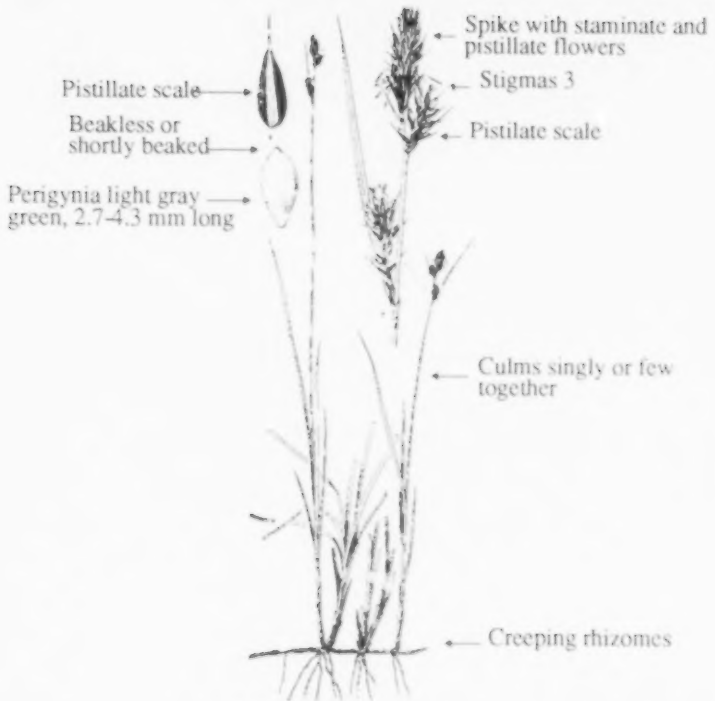
Perigynia with winged margins, serrate distally, 3.5-4.9 mm long
Scales almost equaling the perigynia in size
Inflorescence flexuous, not stiff
Bracts not leaflike, shorter than the head

*CAREX AENEA*

---

**Scientific Name:** *Carex aenea* Fern.
**Common Name:** Bronze sedge
**Family (common name):** Cyperaceae (Sedge Family)
**Synonyms:** *Carex foenea* Willd. var. *aenea* Kuekenth
**Global and State Rank:** G5/S2
**Federal Review Status:** None
**Global Distribution:** Idaho and Montana
**State Distribution:** Fremont, Valley, Idaho, and Kootenai counties
**Ownership:** USDA FS and private
**National Forest:** Payette and Targhee
**Habitat:** Low elevations to montane; along moist meadows, streambanks, and edges of cultivated fields. May-July.

Species
Distribution




*CAREX BUXBAUMII*

---

**Scientific Name:** *Carex buxbaumii* Wahl.

**Common Name:** Buxbaum's sedge

**Family (common name):** Cyperaceae (Sedge Family)

**Synonyms:** *Physiglochis buxbaumii* Raf., *Carex holmiana* Mackenzie

**Global and State Rank:** G5/S1

**Federal Review Status:** None

**Global Distribution:** Circumboreal, known in U.S. from North Carolina, Kentucky, Arkansas, Colorado, Utah, Idaho, and central California

**State Distribution:** Blaine, Bonner, Custer, and Fremont counties

**Ownership:** USDA FS

**National Forest:** Sawtooth and Targhee

**Habitat:** Wet places such as streams, marshes, wet meadows and peat bogs.

*Photo by B. Moseley*

*Photo by B. Moseley*

Species
Distribution

Beak cleft or bidentate, margin serrulate
Perigynia flat, thin, green, 4.1-5.0 mm long, many-nerved
Styles 2
Spikes 3-10, borne in a compact head, first 2 internodes collectively 4-7 mm long
Pistillate scales shorter and narrower than the perigynia
Leaves crowded toward base, shorter than the culms

*CAREX STRAMINIFORMIS*

---

**Scientific Name:** *Carex straminiformis* L. H. Bailey

**Common Name:** Mt. Shasta sedge

**Family (common name):** Cyperaceae (Sedge Family)

**Synonyms:** *Carex straminea* var. *congesta* Boot ex Olney

**Global and State Rank:** G4/S2

**Federal Review Status:** None

**Global Distribution:** Sierra Nevada of California and adjacent Nevada, north to the Cascade Region in Washington. Disjunct in the Wasatch Mountains of Utah, and in central Idaho.

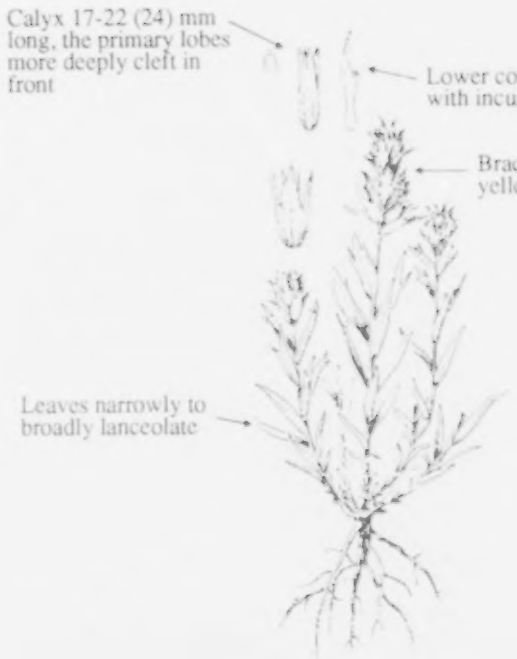
**State Distribution:** Shoshone, Lemhi, and Custer counties

**Ownership:** USDA FS

**National Forest:** Challis and Salmon

**Habitat:** Subalpine and alpine areas on open slopes often near persistent snowbanks.

Species
Distribution


Calyx 17-22 (24) mm long, the primary lobes more deeply cleft in front
Lower corolla lip reduced with incurved teeth
Bracts lanceolate to ovate, yellow to yellow orange
Leaves narrowly to broadly lanceolate

*CASTILLEJA CHRISTII*

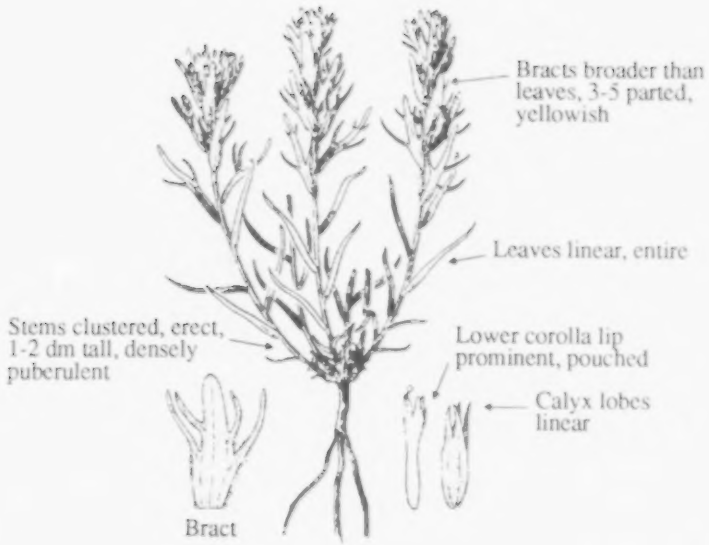
---

**Scientific Name:** *Castilleja christii* N. Holmgren
**Common Name:** Christ's Indian paintbrush
**Family (common name):** Scrophulariaceae (Figwort Family)
**Synonyms:** None
**Global and State Rank:** G1/S1
**Federal Review Status:** C1
**Global Distribution:** Harrison Mountain, Idaho
**State Distribution:** Cassia County
**Ownership:** USDA FS
**National Forest:** Sawtooth
**Habitat:** Subalpine meadows along the crest and slope of the mountains at an elevation of 9,000 to 9,100 feet. July.

*Photo by E. Schlatterer*

*Photo by B. Moseley*

Species
Distribution


Bracts broader than leaves, 3-5 parted, yellowish
Leaves linear, entire
Stems clustered, erect, 1-2 dm tall, densely puberulent
Lower corolla lip prominent, pouched
Calyx lobes linear
Bract

***CASTILLEJA ORESBIA***

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**Scientific Name:** *Castilleja oresbia* Greenm.

**Common Name:** Pale Wallowa Indian paintbrush or Oresby Indian paintbrush

**Family (common name):** Scrophulariaceae (Figwort Family)

**Synonyms:** None

**Global and State Rank:** G3/S2

**Federal Review Status:** 3C

**Global Distribution:** Northeastern Oregon and west-central Idaho

**State Distribution:** Adams, Valley and Washington counties

**Ownership:** USDA FS, BLM, and private

**National Forest:** Payette

**Habitat:** Sagebrush in low-lying swales or depressions with heavy, silty soils and low rock content. May-early July.

*Photo by R. Rosentreter*

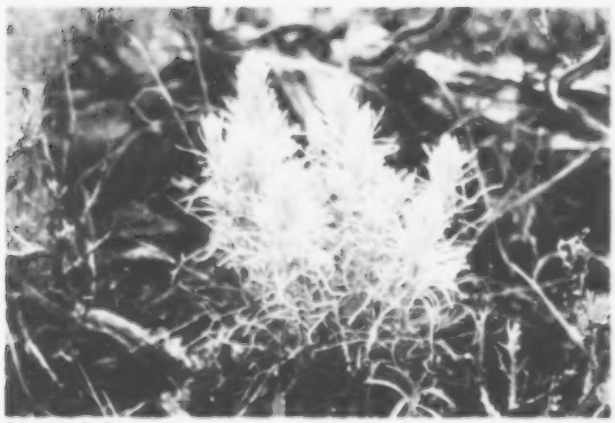
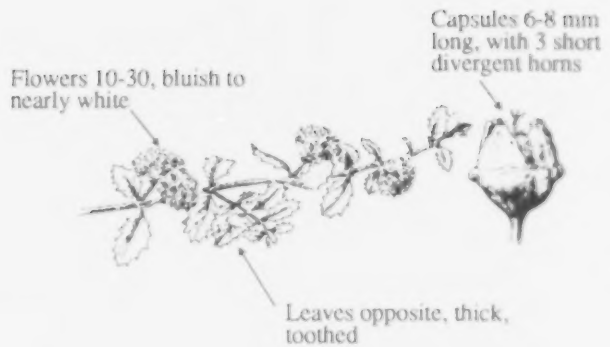


*Photo by R. Rosentreter*

Species Distribution




## *CEANOTHUS PROSTRATUS*

**Scientific Name:** *Ceanothus prostratus* Benth.

**Common Name:** Mahala-mat-ceanothus

**Family (common name):** Rhamnaceae (Buckthorn Family)

**Synonyms:** None

**Global and State Rank:** G5/S1

**Federal Review Status:** None

**Global Distribution:** Eastern slope of the Cascades from Washington, through Oregon to the Sierra Nevada, in western Nevada and in California. Disjunct in west central Idaho.

**State Distribution:** Adams County

**Ownership:** USDA FS? and BLM

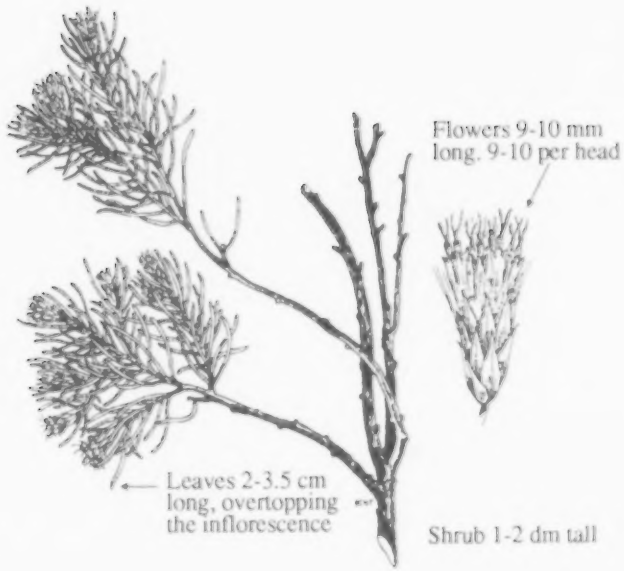
**National Forest:** Payette?

**Habitat:** Ponderosa pine/shrub community

*Photo by B. Moseley*

*Photo by D. Atwood*

Species Distribution




## *CHRYSOTHAMNUS PARRYI* ssp. *MONTANUS*

---

**Scientific Name:** *Chrysothamnus parryi* (Gray) Greene ssp. *montanus* L. Anderson

**Common Name:** Centennial rabbitbrush

**Family (common name):** Asteraceae (Aster Family)

**Synonyms:** None

**Global and State Rank:** G5T1/S1

**Federal Review Status:** PC2

**Global Distribution:** Northeastern Idaho

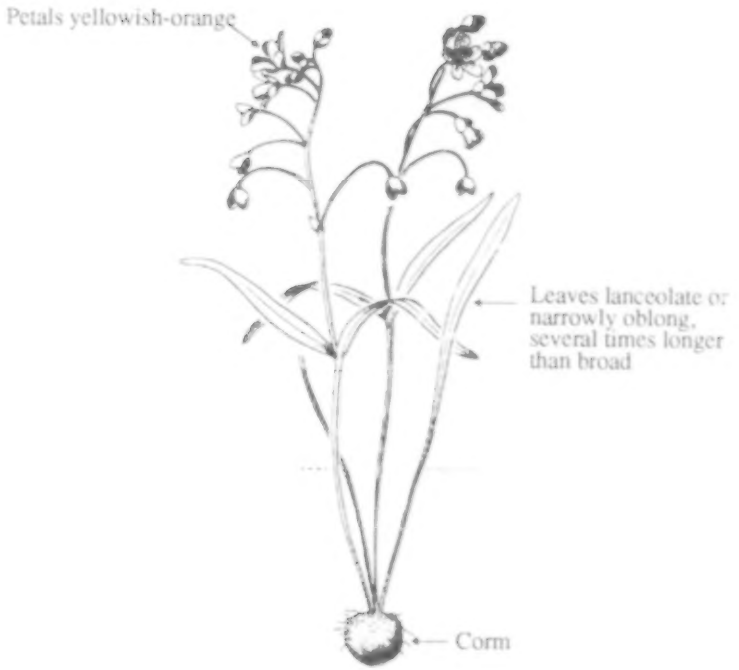
**State Distribution:** Clark County

**Ownership:** USDA FS

**National Forest:** Targhee

**Habitat:** Exposed rocky slopes.

Species
Distribution




*CLAYTONIA LANCEOLATA* var. *FLAVA*

---

**Scientific Name:** *Claytonia lanceolata* Pursh var. *flava* (A. Nels.) C. L. Hitchc.

**Common Name:** Yellow spring-beauty

**Family (common name):** Portulacaceae (Purslane Family)

**Synonyms:** *Claytonia aurea* A. Nels., *Claytonia flava* A. Nels.

**Global and State Rank:** G5T1/S1

**Federal Review Status:** C2

**Global Distribution:** Northeastern Idaho and adjacent Montana and Wyo.

**State Distribution:** Fremont County

**Ownership:** USDA FS? and private

**National Forest:** Targhee?

**Habitat:** Meadows with *Artemisia cana* at 6,700 feet elevation. Late May-early June.

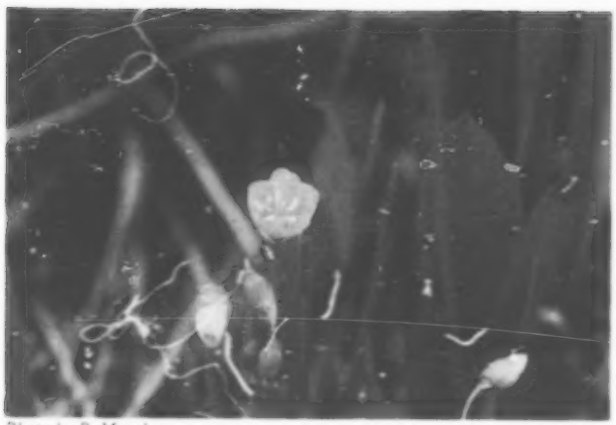
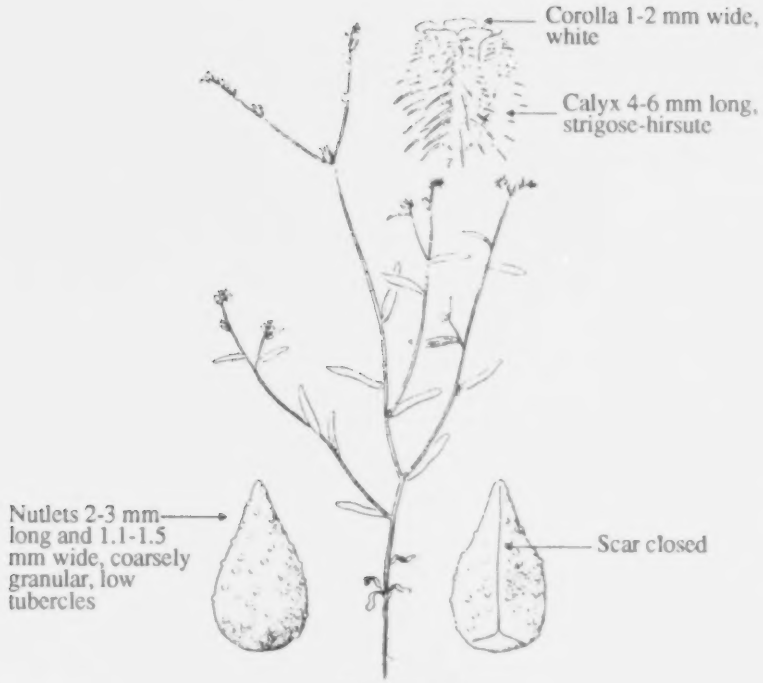


*Photo by B. Moseley*

*Photo by D. Atwood*

Species
Distribution


Corolla 1-2 mm wide, white
Calyx 4-6 mm long, strigose-hirsute
Nutlets 2-3 mm long and 1.1-1.5 mm wide, coarsely granular, low tubercles
Scar closed

Plants annual

***CRYPTANTHA SIMULANS***

---

**Scientific Name:** *Cryptantha simulans* Greene

**Common Name:** Pinewoods cryptantha

**Family (common name):** Boraginaceae (Borage Family)

**Synonyms:** *Cryptantha ambigua* f. *simulans* Brand

**Global and State Rank:** G4/S1

**Federal Review Status:** None

**Global Distribution:** Southern California to central Washington, and disjunct in northern, west-central, and southwestern Idaho.

**State Distribution:** Latah, Owhyee, and Boise counties

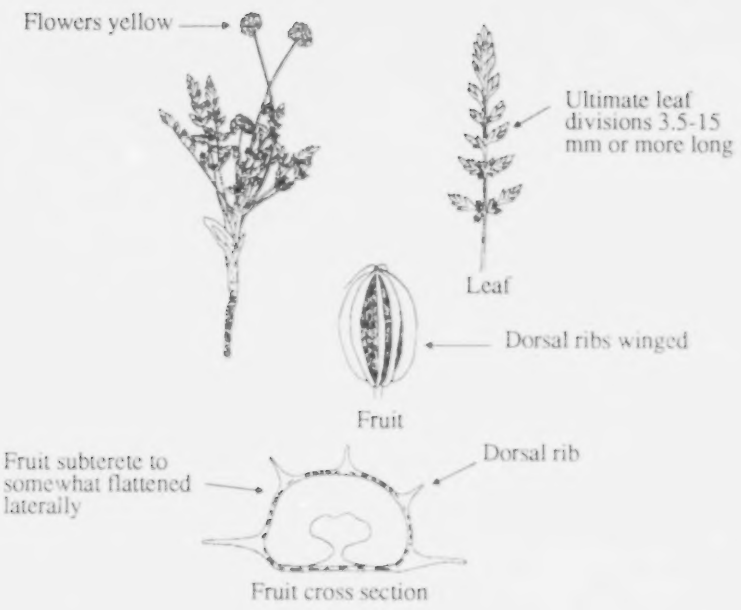
**Ownership:** USDA FS, possibly BLM, and private

**National Forest:** Boise

**Habitat:** Open ponderosa pine forests.

Species
Distribution

best copy available




## *CYMOPTERUS DAVISII*

**Scientific Name:** *Cymopterus davisii* R. L. Hartman
**Common Name:** Davis wavewing
**Family (common name):** Apiaceae (Parsley Family)
**Synonyms:** None
**Global and State Rank:** G1/S1
**Federal Review Status:** PC2
**Global Distribution:** Southern Idaho on Mt. Harrison and Cache Peak
**State Distribution:** Cassia County
**Ownership:** USDA FS
**National Forest:** Sawtooth
**Habitat:** Subalpine and alpine areas on grassy slopes, gravelly disturbed sites, or rock outcrops. July-August.

*Photo by D. Atwood*

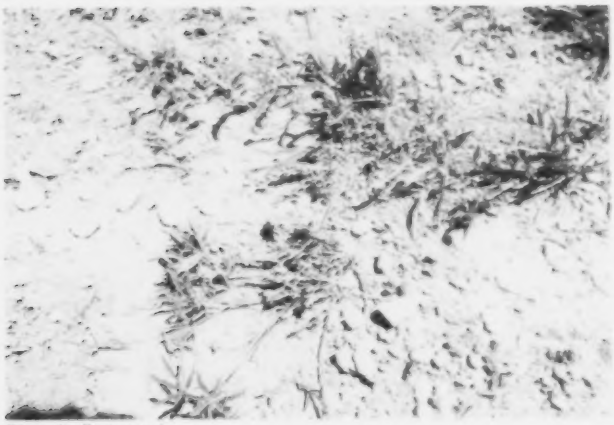
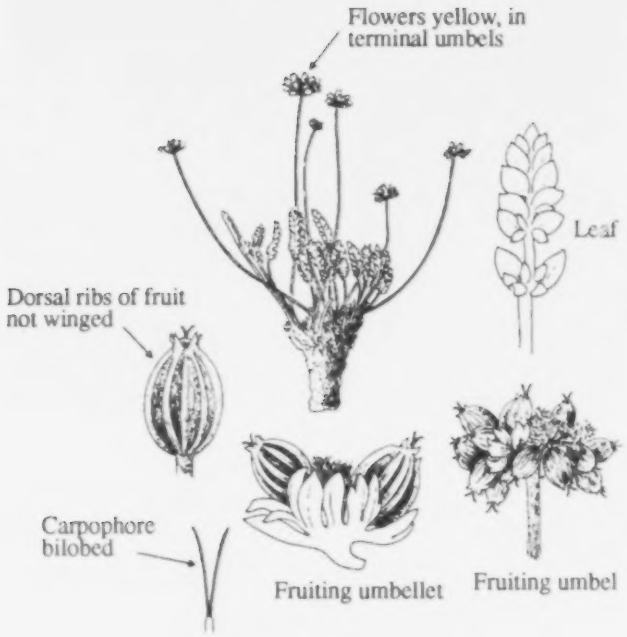


*Photo by D. Atwood*

Species Distribution




## *CYMOPTERUS DOUGLASSII*

---

**Scientific Name:** *Cymopterus douglassii* R. L. Hartman & L. Constance

**Common Name:** Douglass' wavewing

**Family (common name):** Apiaceae (Parsley Family)

**Synonyms:** None

**Global and State Rank:** G2/S2

**Federal Review Status:** PC2

**Global Distribution:** Lost River Range and Lemhi Range in east-central Idaho

**State Distribution:** Lehmi and Custer counties

**Ownership:** USDA FS

**National Forest:** Challis, Salmon, and Targhee

**Habitat:** Alpine and subalpine areas on open slopes, ridges and summits in calcareous or dolomitic substrates. Mid June-August.

*Photo by D. Atwood*

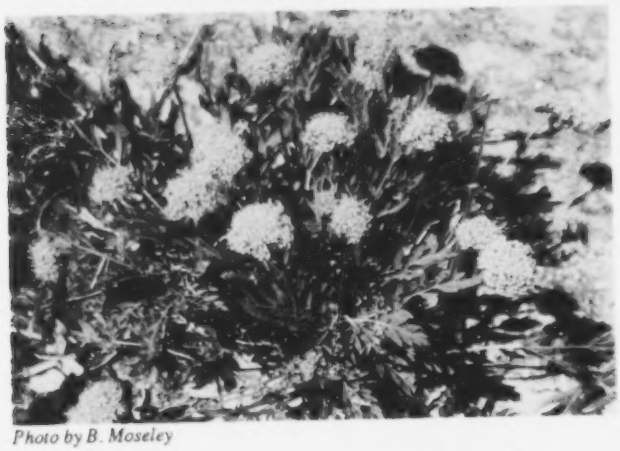
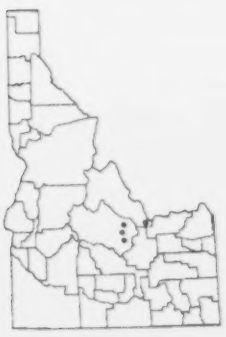
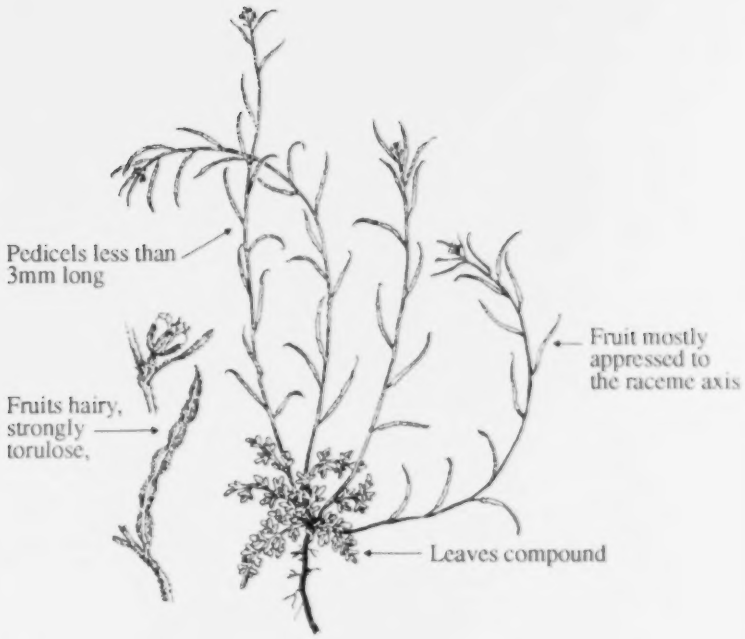


*Photo by B. Moseley*

Species Distribution






***DESCURAINIA TORULOSA***

---

**Scientific Name:** *Descurainia torulosa* Rollins

**Common Name:** Wyoming tansymustard

**Family (common name):** Brassicaceae (Mustard Family)

**Synonyms:** None

**Global and State Rank:** G1/S1

**Federal Review Status:** C2

**Global Distribution:** Northwestern and south-central Wyoming

**State Distribution:** Fremont, Park and Sweetwater counties

**Ownership:** USDA FS?

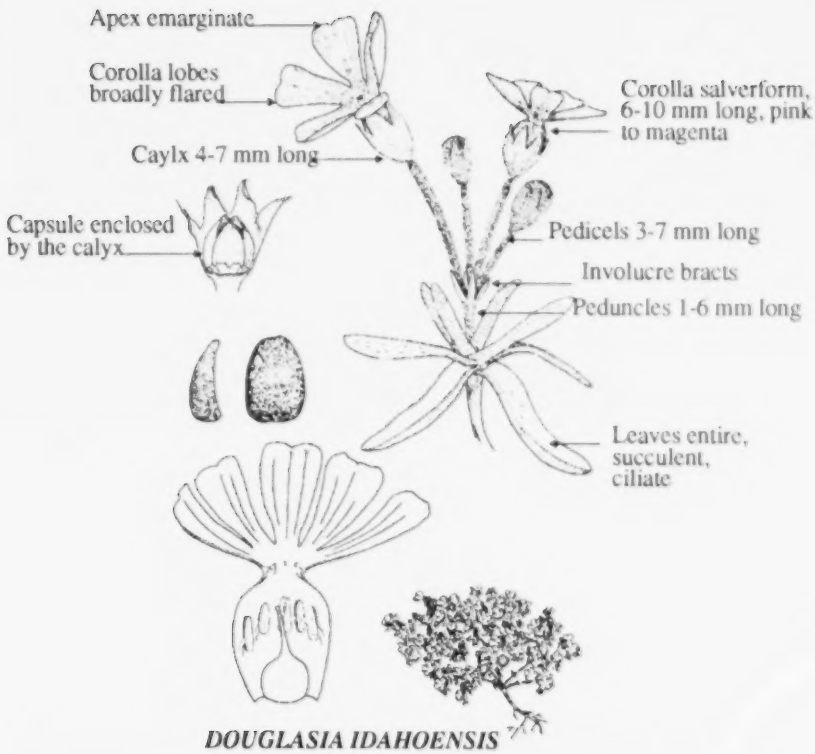
**National Forest:** Bridger-Teton?

**Habitat:** Rocky places in high mountains between 8,000 to 10,800 feet elevation. July-August

*Photo by H. Marriott*

*Photo by H. Marriott*

Species
Distribution


Apex emarginate
Corolla lobes broadly flared
Caylx 4-7 mm long
Capsule enclosed by the calyx
Corolla salverform, 6-10 mm long, pink to magenta
Pedicels 3-7 mm long
Involucre bracts
Peduncles 1-6 mm long
Leaves entire, succulent, ciliate

***DOUGLASIA IDAHOENSIS***

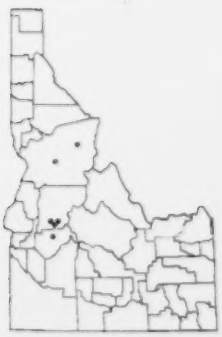
---

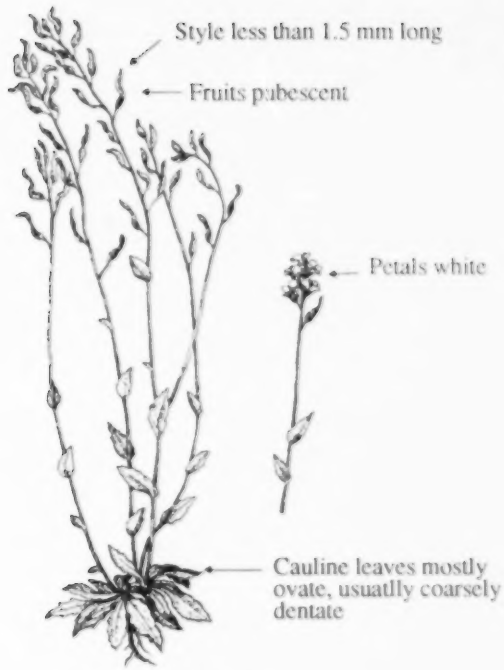
**Scientific Name:** *Douglasia idahoensis* D. Henderson
**Common Name:** Idaho douglasia
**Family (common name):** Primulaceae (Primrose Family)
**Synonyms:** None
**Global and State Rank:** G1/S1
**Federal Review Status:** C2
**Global Distribution:** Central Idaho
**State Distribution:** Idaho, Boise, and Valley counties
**Ownership:** USDA FS
**National Forest:** Boise and Payette?
**Habitat:** Subalpine forest with gravelly soils derived from granitic parent material. July.

*Photo by B. Moseley*

*Photo by B. Moseley*

Species Distribution

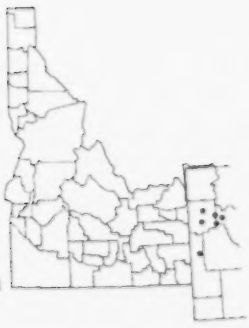





***DRABA BOREALIS***

---

**Scientific Name:** *Draba borealis* DC.
**Common Name:** Boreal draba
**Family (common name):** Brassicaeae (Mustard Family)
**Synonyms:** None
**Global and State Rank:** G4/S1
**Federal Review Status:** None
**Global Distribution:** Western Wyoming
**State Distribution:** Fremont, Teton and Lincoln counties
**Ownership:** USDA FS
**National Forest:** Bridger-Teton
**Habitat:** Rocky slopes and meadows between 6,800 to 7,000 feet elevation. July-August



Species
Distribution

## *DRABA DAVIESIAE*

**Scientific Name:** *Draba daviesiae* (Hitchc.) Rollins
**Common Name:** Davies' whitlow-grass
**Family (common name):** Brassicaceae (Mustard Family)
**Synonyms:** *Draba apiculata* var. *daviesiae*
**Global and State Rank:** G2/S1
**Federal Review Status:** None
**Global Distribution:** Central Idaho and Montana
**State Distribution:** Custer County
**Ownership:** USDA FS and BLM
**National Forest:** Challis and NRA administered by Sawtooth
**Habitat:** Fell-field habitats. June-August.

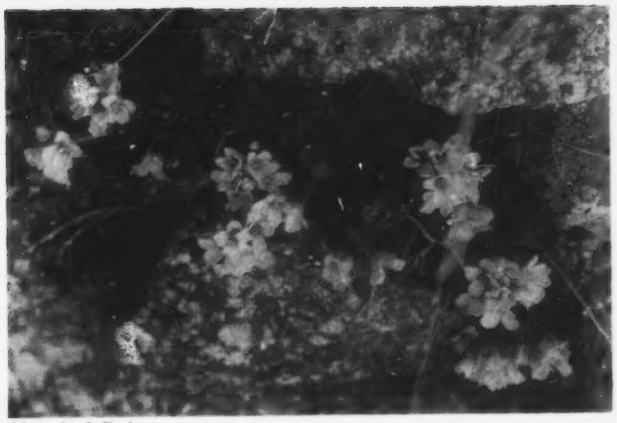
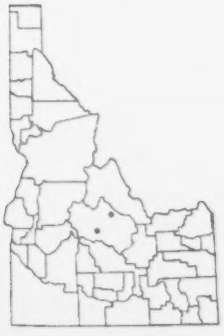


*Photo by J. Duft*

*Photo by B. Moseley*

Species
Distribution



Styles ca 5 mm long
Siliques ovate, flattened toward apex with dentritic trichomes, 2.5-4 mm long 2-3 mm wide
Leaves densely rosulate, 2-3 mm long, 1-1.5 mm wide, with coarse dendritic or forked trichomes

## *DRABA TRICHOCARPA*

---

**Scientific Name:** *Draba trichocarpa* Rollins
**Common Name:** Stanley whitlow-grass
**Family (common name):** Brassicaceae (Mustard Family)
**Synonyms:** None
**Global and State Rank:** G2/S2
**Federal Review Status:** PC1
**Global Distribution:** Central Idaho
**State Distribution:** Custer County
**Ownership:** USDS FS and private
**National Forest:** Challis (Sawtooth NRA) and Sawtooth
**Habitat:** Steep slopes on granitic parent material. June-August.

*Photo by B. Moseley*

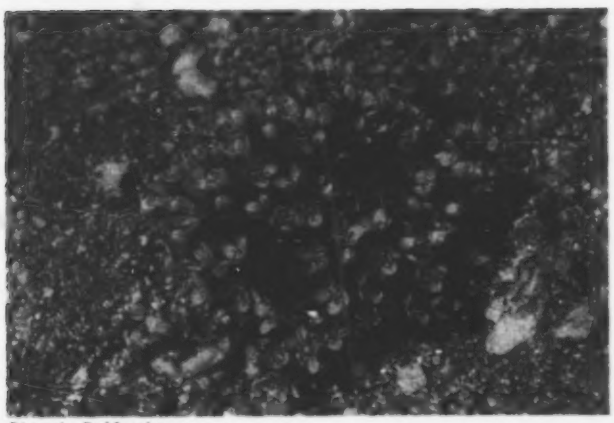
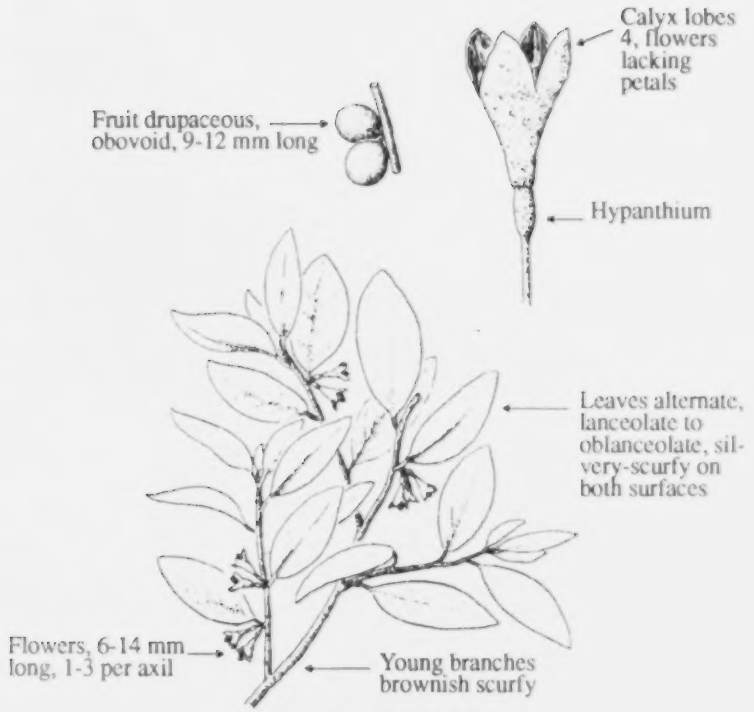


*Photo by B. Moseley*

Species Distribution


Calyx lobes 4, flowers lacking petals
Fruit drupaceous, obovoid, 9-12 mm long
Hypanthium
Leaves alternate, lanceolate to oblanceolate, silvery-scurfy on both surfaces
Flowers, 6-14 mm long, 1-3 per axil
Young branches brownish scurfy

*ELAEAGNUS COMMUTATA*

---

**Scientific Name:** *Elaeagnus commutata* Bernh.

**Common Name:** American silverberry

**Family (common name):** Elaeagnaceae (Oleaster Family)

**Synonyms:** *Elaeagnus argentea* Pursh, not Moench

**Global and State Rank:** G5/S3

**Federal Review Status:** None

**Global Distribution:** Alaska and Yukon, east to Quebec, south to Idaho, Wyoming and Minnesota

**State Distribution:** Jefferson, Bonneville, and Custer counties

**Ownership:** USDA FS, BLM, and private

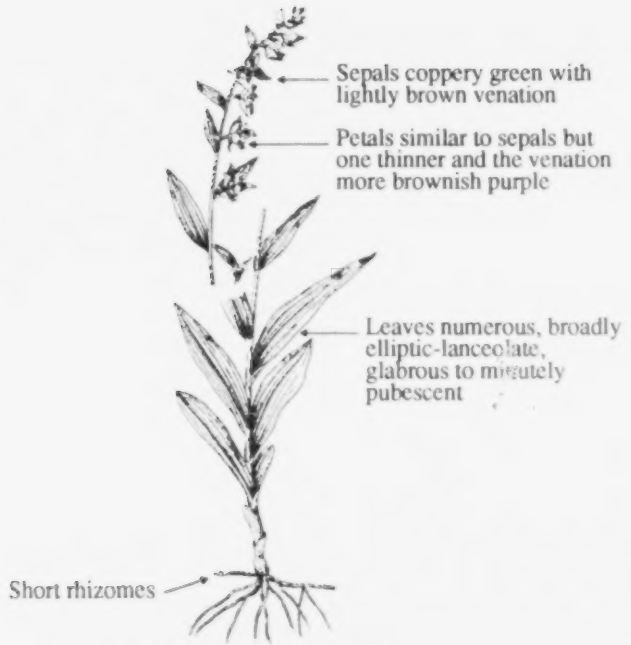
**National Forest:** Targhee

**Habitat:** Riparian shrub communities. June-July.

*Photo by B. Moseley*

*Photo by B. Moseley*

Species Distribution


Sepals coppery green with lightly brown venation
Petals similar to sepals but one thinner and the venation more brownish purple
Leaves numerous, broadly elliptic-lanceolate, glabrous to minutely pubescent
Short rhizomes

***EPIPACTIS GIGANTEA***

---

**Scientific Name:** *Epipactis gigantea* Dougl. ex Hook.

**Common Name:** Giant helleborine

**Family (common name):** Orchidaceae (Orchid Family)

**Synonyms:** *Limodorum giganteum* Kuntze, *Peramium giganteum* Coult., *Serapias gigantea* Eat., *Helleborine gigantea* Druce, *Amesia gigantea* Nels. & Macbr.

**Global and State Rank:** G5/S2

**Federal Review Status:** None

**Global Distribution:** British Columbia south to Mexico, in most of western U.S. to the Rocky Mountains

**State Distribution:** Idaho, Boise, Elmore, Owyhee, Jerome, Lemhi, Boundary, Custer, and Clark counties

**Ownership:** USDA FS, BLM, and private

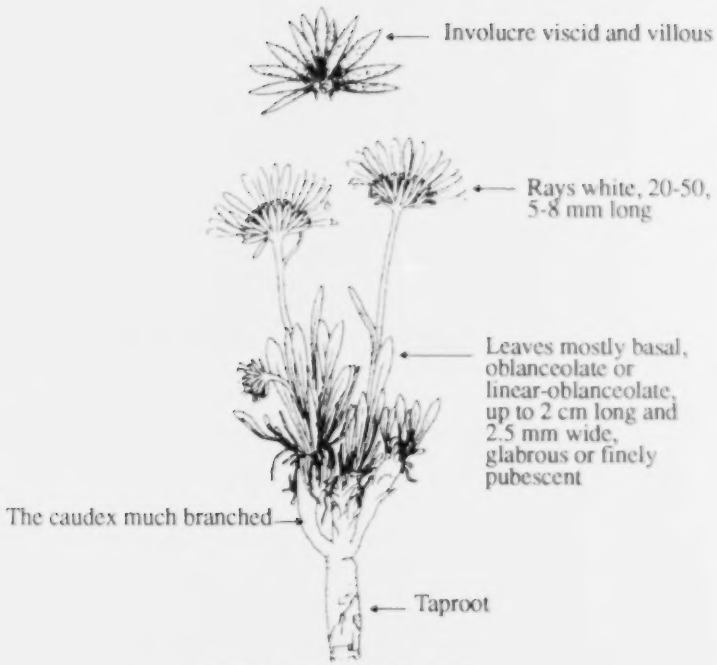
**National Forest:** Challis, Boise, Salmon, Sawtooth, Targhee?, and Payette

**Habitat:** Moist areas such as springs, streambanks, seeps and thermal sites. May-August.

*Photo by B. Moseley*

*Photo by R. Rosentreter*

Species
Distribution


Involucre viscid and villous
Rays white, 20-50, 5-8 mm long
Leaves mostly basal, oblanceolate or linear-oblanceolate, up to 2 cm long and 2.5 mm wide, glabrous or finely pubescent
The caudex much branched
Taproot

***ERIGERON RADICATUS***

---

**Scientific Name:** *Erigeron radicatus* Hook.

**Common Name:** Taprooted fleabane

**Family (common name):** Asteraceae (Aster Family)

**Synonyms:** None

**Global and State Rank:** G2G3/S2

**Federal Review Status:** None

**Global Distribution:** Rocky Mountains of southern Alberta and British Columbia. Disjunct in east-central Idaho and adjacent Montana.

**State Distribution:** Custer, Butte, and Lemhi counties

**Ownership:** USDA FS

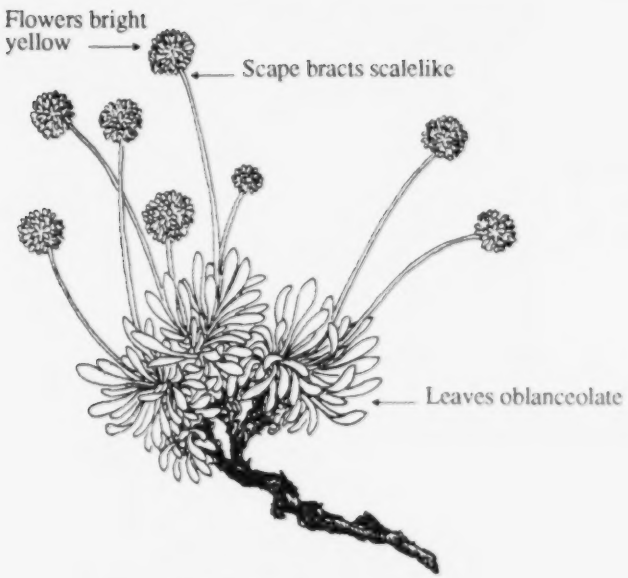
**National Forest:** Challis, Salmon, and Targhee

**Habitat:** Alpine and subalpine areas on rocky ridges and flats. May-June.

*Photo by B. Moseley*

*Photo by B. Moseley*

Species
Distribution




Plants forming dense sprawling mats

***ERIOGONUM MELEDONUM***

---

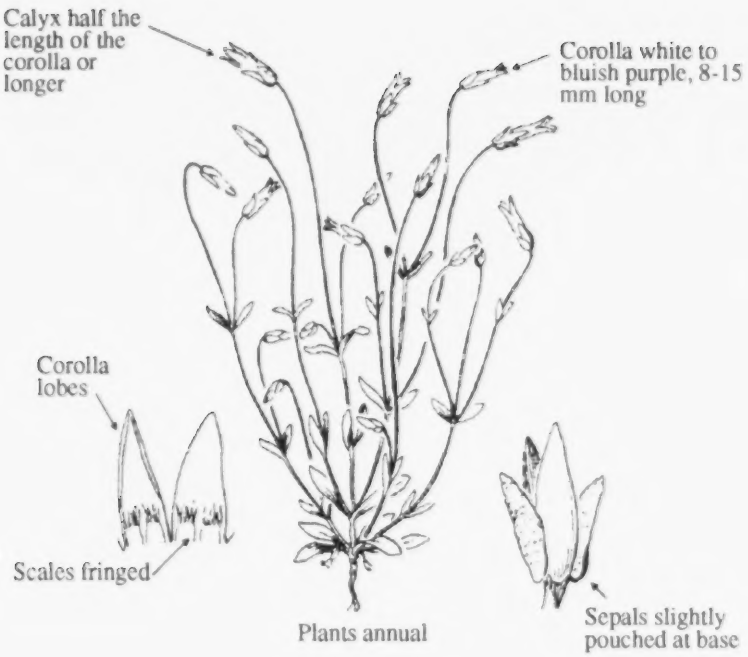
**Scientific Name:** *Eriogonum meledonum* sp. nov.
**Common Name:** Guardian buckwheat
**Family (common name):** Polygonaceae (Buckwheat Family)
**Synonyms:** None
**Global and State Rank:** G1/S1
**Federal Review Status:** None
**Global Distribution:** Central Idaho
**State Distribution:** Custer County
**Ownership:** USDA FS and private
**National Forest:** Challis (Sawtooth NRA) and Sawtooth
**Habitat:** Unstable scree slopes on granitic parent materials.

*Photo by B. Moseley*

Species
Distribution

*Photo by B. Moseley*

Species
Distribution


Calyx half the length of the corolla or longer
Corolla white to bluish purple, 8-15 mm long
Corolla lobes
Scales fringed
Plants annual
Sepals slightly pouched at base

*GENTIANELLA TENELLA*

---

**Scientific Name:** *Gentianella tenella* Rottb.

**Common Name:** Slender gentian

**Family (common name):** Gentianaceae (Gentian Family)

**Synonyms:** *Amarella tenella* Cockerell, *Gentiana monantha* A. Nels.

**Global and State Rank:** G4/S1

**Federal Review Status:** None

**Global Distribution:** Circumpolar, south in the Rocky Mountains to Colorado and central Idaho.

**State Distribution:** Custer County

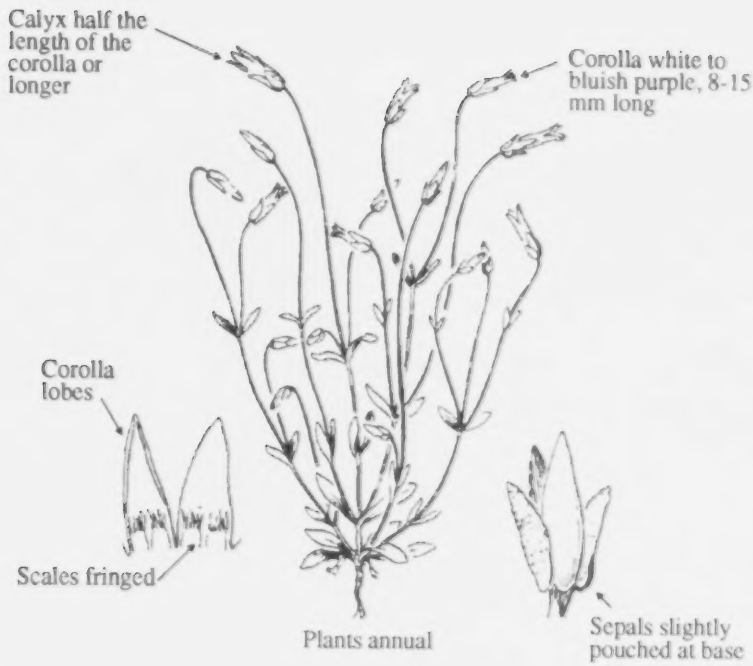
**Ownership:** USDA FS

**National Forest:** Challis

**Habitat:** Moist subalpine and alpine meadows. July-August

*Photo by B. Moseley*

Species Distribution

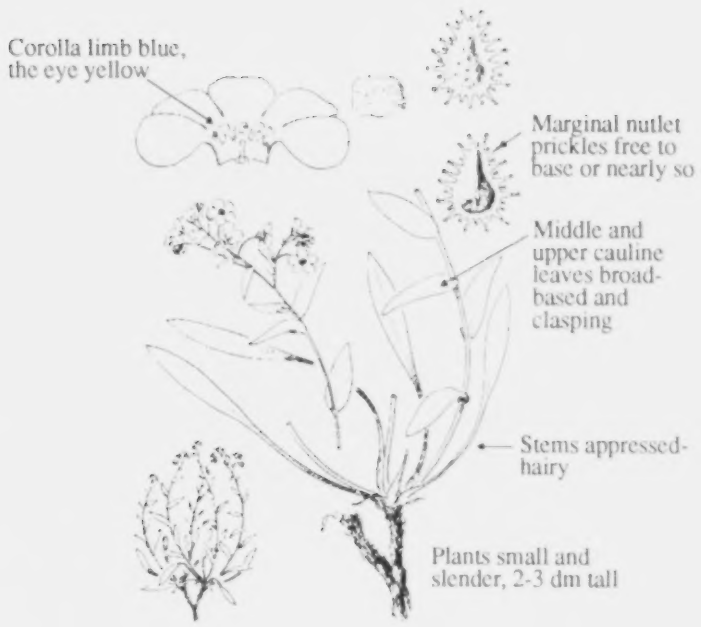

Calyx half the length of the corolla or longer
Corolla white to bluish purple, 8-15 mm long
Corolla lobes
Scales fringed
Plants annual
Sepals slightly pouched at base

*GENTIANELLA TENELLA*

---

**Scientific Name:** *Gentianella tenella* Rottb.
**Common Name:** Slender gentian
**Family (common name):** Gentianaceae (Gentian Family)
**Synonyms:** *Amarella tenella* Cockerell, *Gentiana monantha* A. Nels.
**Global and State Rank:** G4/S1
**Federal Review Status:** None
**Global Distribution:** Circumpolar, south in the Rocky Mountains to Colorado and central Idaho.
**State Distribution:** Custer County
**Ownership:** USDA FS
**National Forest:** Challis
**Habitat:** Moist subalpine and alpine meadows. July-August

Species
Distribution


Corolla limb blue, the eye yellow
Marginal nutlet prickles free to base or nearly so
Middle and upper cauline leaves broad-based and clasping
Stems appressed-hairy
Plants small and slender, 2-3 dm tall

***HACKELIA DAVISII***

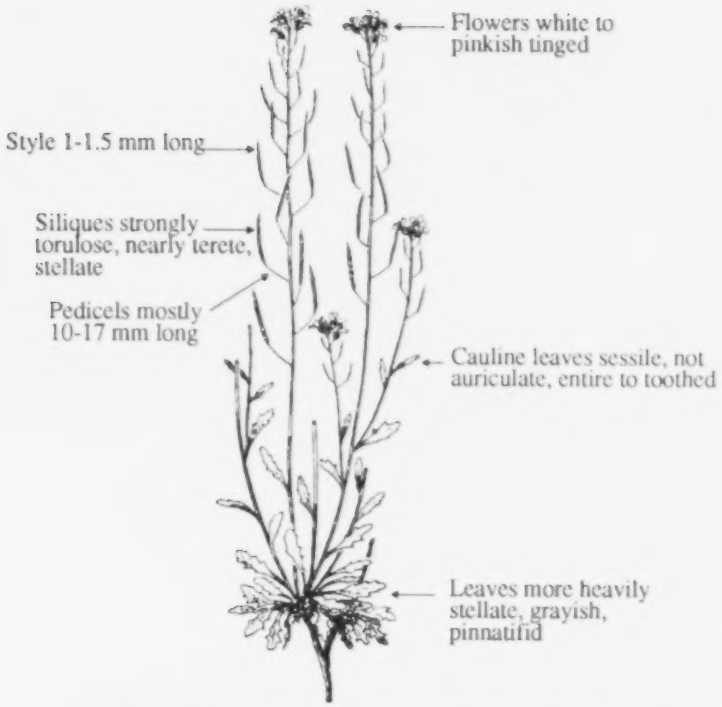
---

**Scientific Name:** *Hackelia davisii* Cronquist
**Common Name:** Davis forget-me-not
**Family (common name):** Boraginaceae (Borage Family)
**Synonyms:** None
**Global and State Rank:** G3/S3
**Federal Review Status:** 3C
**Global Distribution:** East-central Idaho
**State Distribution:** Custer and Lemhi counties
**Ownership:** USDA FS
**National Forest:** Challis and Salmon
**Habitat:** Cliffs or talus near base of cliffs, generally below 5,500 feet elevation. May-July.

*Photo by D. Henderson*

*Photo by D. Henderson*

Species
Distribution


Flowers white to pinkish tinged
Style 1-1.5 mm long
Siliques strongly torulose, nearly terete, stellate
Pedicels mostly 10-17 mm long
Cauline leaves sessile, not auriculate, entire to toothed
Leaves more heavily stellate, grayish, pinnatifid

***HALIMOLOBOS PERPLEXA* var. *LEMHIENSIS***

---

**Scientific Name:** *Halimolobos perplexa* (Henderson) var. *lemhiensis* C. L. Hitchcock

**Common Name:** Puzzling halimolobos

**Family (common name):** Brassicaceae (Mustard Family)

**Synonyms:** None

**Global and State Rank:** G4T4/S4

**Federal Review Status:** 3C

**Global Distribution:** Central Idaho

**State Distribution:** Custer, Valley, and Lemhi counties

**Ownership:** USDA FS

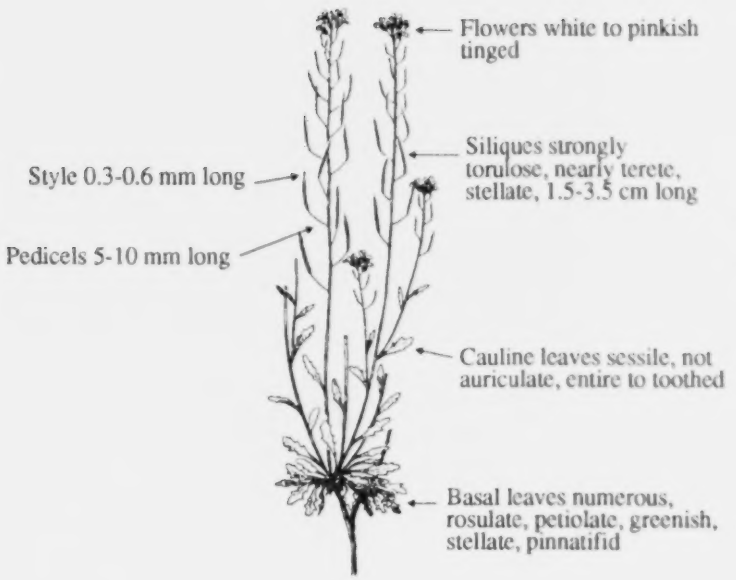
**National Forest:** Challis, Salmon, and Boise

**Habitat:** Gravelly or sandy slopes, roadcuts, and dredge tailings composed of granitic parent material, at elevations from 3,000 to 5,000 feet. May-June.

*Photo by B. Moseley*

*Photo by D. Henderson*

Species Distribution


Flowers white to pinkish tinged
Siliques strongly torulose, nearly terete, stellate, 1.5-3.5 cm long
Style 0.3-0.6 mm long
Pedicels 5-10 mm long
Cauline leaves sessile, not auriculate, entire to toothed
Basal leaves numerous, rosulate, petiolate, greenish, stellate, pinnatifid

## *HALIMOLOBUS PERPLEXA* var. *PERPLEXA*

---

**Scientific Name:** *Halimolobos perplexa* (Hend.) Rollins var. *perplexa*

**Common Name:** Puzzling halimolobos

**Family (common name):** Brassicaceae (Mustard Family)

**Synonyms:** *Sisymbrium perplexum* Henderson, *Sophia perplexa* Rydb.

**Global and State Rank:** G4T3/S3

**Federal Review Status:** C2 (P3C)

**Global Distribution:** West-central Idaho

**State Distribution:** Adams and Idaho counties

**Ownership:** USDA FS, BLM, and private

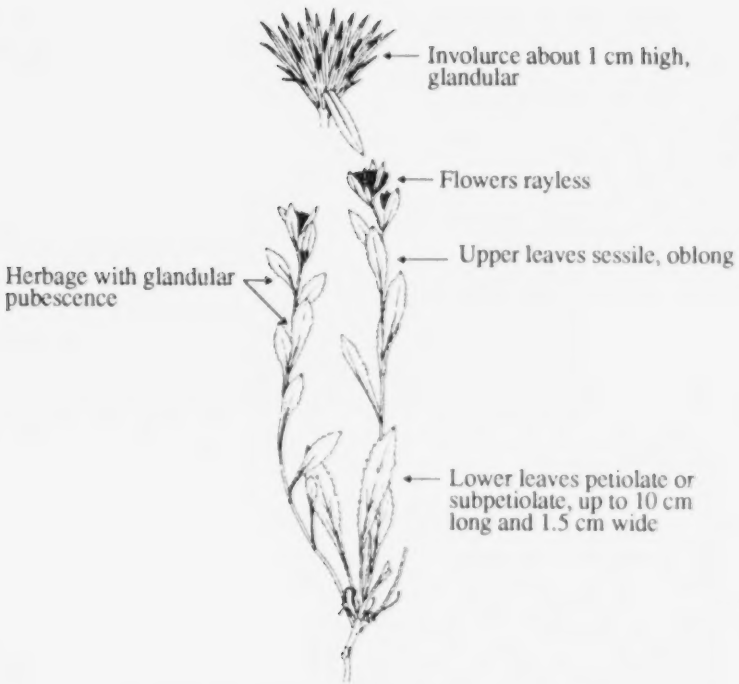
**National Forest:** Payette

**Habitat:** Associated with ponderosa pine, Idaho fescue, and bluebunch grass on cliffs to gentle slopes from 3,200 to 4,800 feet elevation. May-September.

*Photo by R. Rosentreter*

*Photo by R. Rosentreter*

Species
Distribution


Involucre about 1 cm high, glandular
Flowers rayless
Upper leaves sessile, oblong
Herbage with glandular pubescence
Lower leaves petiolate or subpetiolate, up to 10 cm long and 1.5 cm wide

***HAPLOPAPPUS ABERRANS***

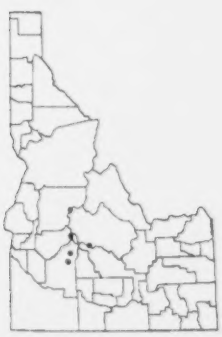
---

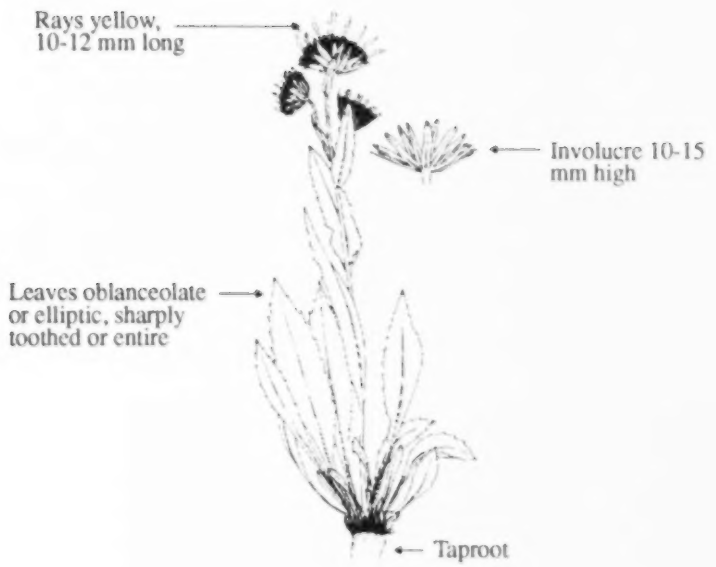
**Scientific Name:** *Haplopappus aberrans* (A. Nels.) Hall
**Common Name:** None
**Family (common name):** Asteraceae (Aster Family)
**Synonyms:** *Macronema aberrans* A. Nels., *Sideranthus aberrans* Rydb.
**Global and State Rank:** G3?/S3?
**Federal Review Status:** 3C
**Global Distribution:** South-central Idaho
**State Distribution:** Boise, Elmore, Valley and Custer counties
**Ownership:** USDA FS
**National Forest:** Boise, Challis and Sawtooth
**Habitat:** Crevices of rock outcrops among boulders and rocky ground, between elevations of 6,000 to 10,000 feet. July-September.

*Photo by E. Moseley*

*Photo by B. Moseley*

Species
Distribution






## *HAPLOPAPPUS INSECTICURIS*

**Scientific Name:** *Haplopappus insecticruris* Henderson

**Common Name:** Bugleg goldenweed

**Family (common name):** Asteraceae (Aster Family)

**Synonyms:** *Pyrrocoma insecticruris* Heller, *Pyrrocoma pratensis* Greene, *Haplopappus integrifolius* ssp. *insecticruris* Hall

**Global and State Rank:** G3/S3

**Federal Review Status:** C2

**Global Distribution:** South-central Idaho

**State Distribution:** Camas and Elmore counties

**Ownership:** USDA FS and private

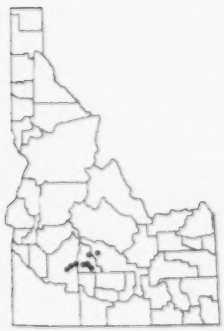
**National Forest:** Sawtooth

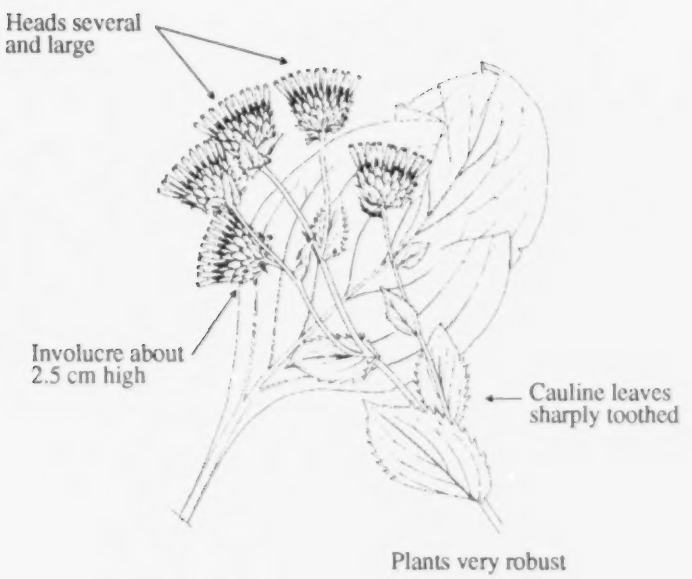
**Habitat:** Sagebrush and grass meadow areas around 5,000 to 6,000 feet elevation. July-August.

*Photo by B. Moseley*

*Photo by B. Moseley*

Species
Distribution






## *HAPLOPAPPUS RADIATUS*

**Scientific Name:** *Haplopappus radiatus* (Nutt.) Cronq.

**Common Name:** Radiate goldenrod or Snake River goldenweed

**Family (common name):** Asteraceae (Aster Family)

**Synonyms:** *Pyrrocoma radiata* Nutt., *Haplopappus carthamoides* (Hook.) Gray var. *maximus* Gray, *Haplopappus carthamoides* (Hook.), Gray ssp. *maximus* Hall

**Global and State Rank:** G2?/S1

**Federal Review Status:** C2

**Global Distribution:** Western Idaho and northeastern Oregon

**State Distribution:** Washington County

**Ownership:** USDA FS?, BLM, state, and private

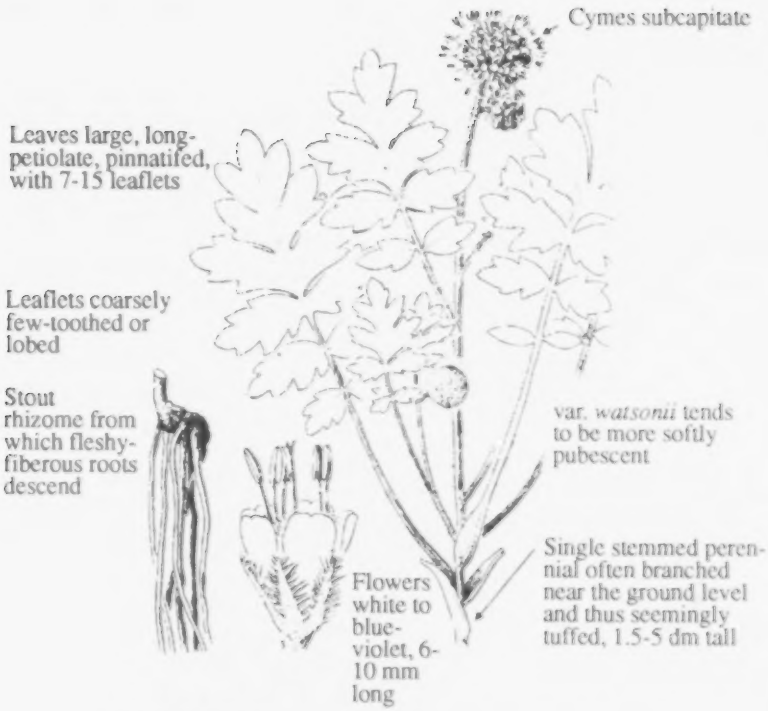
**National Forest:** Payette?

**Habitat:** Steep rocky hillsides; gravelly terraces at elevations between 2,200 to 3,000 feet. July.

*Photo by U.S. Fish & Wildlife Service*

*Photo by U.S. Fish & Wildlife Service*

Species Distribution


Cymes subcapitate
Leaves large, long-petiolate, pinnatifed, with 7-15 leaflets
Leaflets coarsely few-toothed or lobed
Stout rhizome from which fleshy-fiberous roots descend
var. watsonii tends to be more softly pubescent
Single stemmed perennial often branched near the ground level and thus seemingly tuffed, 1.5-5 dm tall
Flowers white to blue-violet, 6-10 mm long

***HYDROPHYLLUM OCCIDENTALE* var. *WATSONII***

---

**Scientific Name:** *Hydrophyllum occidentale* (Wats.) Gray var. *watsonii* Gray

**Common Name:** Western waterleaf

**Family (common name):** Hydrophyllaceae (Waterleaf Family)

**Synonyms:** *Hydrophyllum watsonii* Rydb.

**Global and State Rank:** G4T4/S1

**Federal Review Status:** None

**Global Distribution:** Great Basin and Idaho.

**State Distribution:** Elmore and Oneida counties

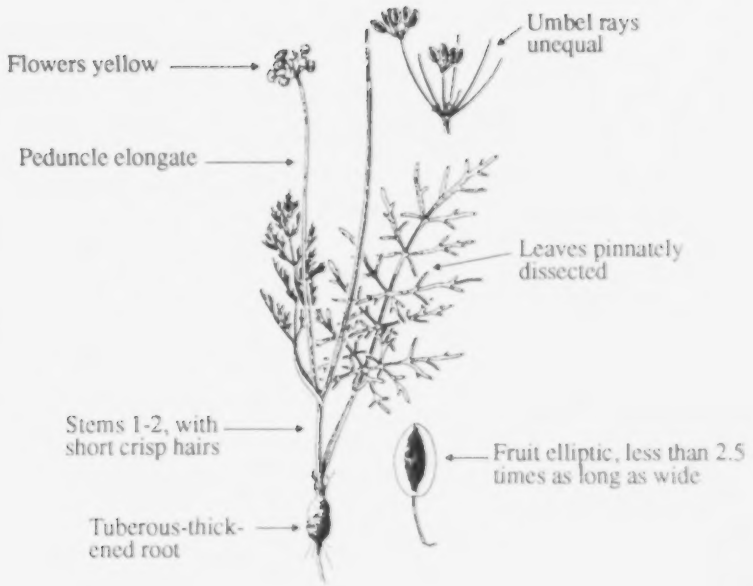
**Ownership:** BLM, USDA FS, and possibly state

**National Forest:** Boise

**Habitat:** Thickets, dense or open woods, and moist places. April-July.

*Photo by B. Moseley*

Species
Distribution


Umbel rays unequal
Flowers yellow
Peduncle elongate
Leaves pinnately dissected
Stems 1-2, with short crisp hairs
Fruit elliptic, less than 2.5 times as long as wide
Tuberous-thickened root

***LOMATIUM ROLLINSII***

---

**Scientific Name:** *Lomatium rollinsii* Mathias and Constance

**Common Name:** Rollins' desert parsley

**Family (common name):** Apiaceae (Parsley Family)

**Synonyms:** None

**Global and State Rank:** G4/S3

**Federal Review Status:** C2 (P3C)

**Global Distribution:** Northeast Oregon, southeast Washington, western Idaho

**State Distribution:** Idaho and Nez Perce counties

**Ownership:** USDA FS, BLM, IDFG, and private

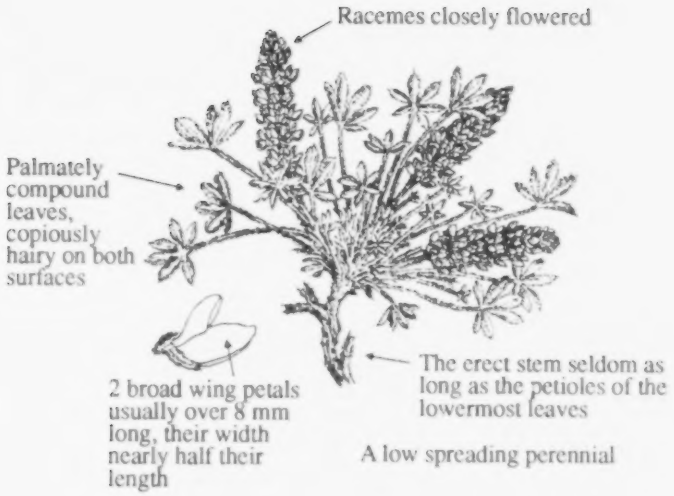
**National Forest:** Payette?

**Habitat:** Mesic grassy slopes in deep soil; also on drier rockier hillsides and sandy bars. Mid March-Mid May

*Photo by B. Moseley*

*Photo by B. Moseley*

Species Distribution


Racemes closely flowered
Palmately compound leaves, copiously hairy on both surfaces
2 broad wing petals usually over 8 mm long, their width nearly half their length
The erect stem seldom as long as the petioles of the lowermost leaves
A low spreading perennial

## *LUPINUS CUSICKII* var. *CUSICKII*

**Scientific Name:** *Lupinus cusickii* S. Wats. var. *cusickii*
**Common Name:** Cusick's lupine
**Family (common name):** Fabaceae (Pea Family)
**Synonyms:** None
**Global and State Rank:** G2T1/S1
**Federal Review Status:** C2
**Global Distribution:** Oregon and central Idaho
**State Distribution:** Valley County
**Ownership:** USDA FS? and private?
**National Forest:** Payette?
**Habitat:** Dry hillsides about 5,000 feet elevation.

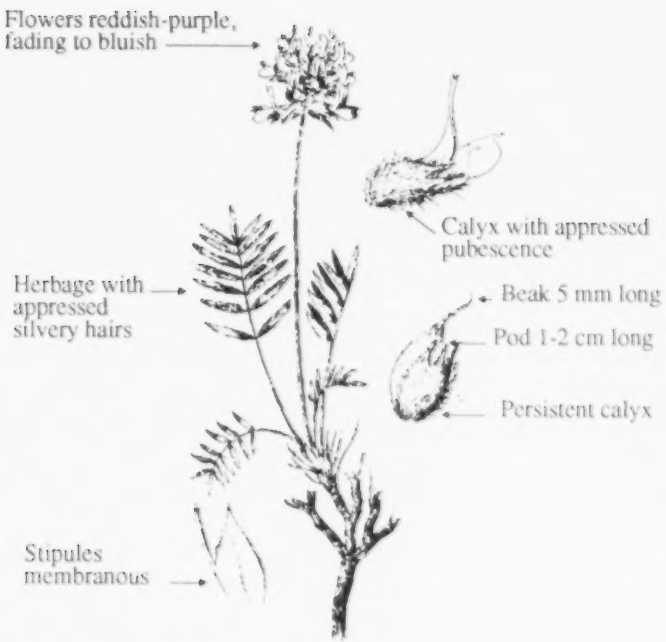
Species
Distribution

Involucre glandular
Simular to *Aster shastensis* in habit and involucre but with perfectly glabrous, leaves and subglabrous stems
Biennial or short-lived perennial, 2 dm tall or less

## *MACHAERANTHERA LAETEVIRENS*

**Scientific Name:** *Machaeranthera laetevirens* Greene
**Common Name:** Vivid green aster
**Family (common name):** Asteraceae (Aster Family)
**Synonyms:** *Aster leiodes* Blake
**Global and State Rank:** G1/S1
**Federal Review Status:** PC2
**Global Distribution:** Nevada and south-central Idaho
**State Distribution:** Cassia, Custer, and Blaine counties
**Ownership:** USDA FS
**National Forest:** Challis and Sawtooth
**Habitat:** Unstable slopes in a sagebrush community above 7,000 feet elevation. July

Species
Distribution




## *OXYTROPIS BESSEYI* var. *SALMONENSIS*

---

**Scientific Name:** *Oxytropis besseyi* (Rydb.) Blank var. *salmonensis* Barneby

**Common Name:** Challis crazyweed

**Family (common name):** Fabaceae (Pea Family)

**Synonyms:** None

**Global and State Rank:** G5T3/S2

**Federal Review Status:** None

**Global Distribution:** Central Idaho

**State Distribution:** Custer County

**Ownership:** USDA FS, State, and BLM

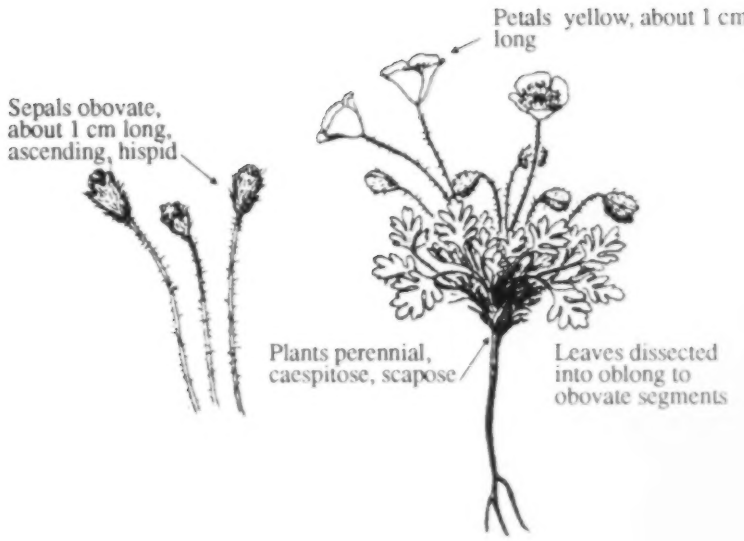
**National Forest:** Challis

**Habitat:** Sagebrush and salt desert shrub in sandy washes or open slopes of rocky volcanic soil. June-early July.

*Photo by D. Henderson*

*Photo by D. Atwood*

Species Distribution


Petals yellow, about 1 cm long
Sepals obovate, about 1 cm long, ascending, hispid
Plants perennial, caespitose, scapose
Leaves dissected into oblong to obovate segments

***PAPAVER KLUANENSE***

---

**Scientific Name:** *Papaver kluanense* D. Love

**Common Name:** Arctic poppy

**Family (common name):** Papaveraceae (Poppy Family)

**Synonyms:** None

**Global and State Rank:** G4/S1

**Federal Review Status:** None

**Global Distribution:** Arctic and boreal regions of North America, extending sporadically south to Colorado.

**State Distribution:** Lemhi County

**Ownership:** USDA FS

**National Forest:** Challis and Targhee

**Habitat:** Alpine rocky ledges and cliffs on near-vertical quartzite rock, rocky summits. July-August.

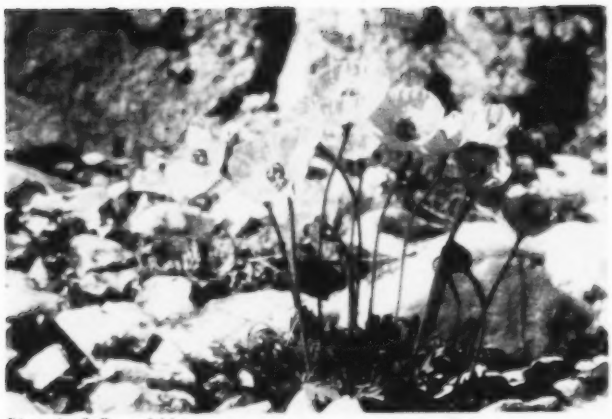


*Photo by S. Brunsfeld*

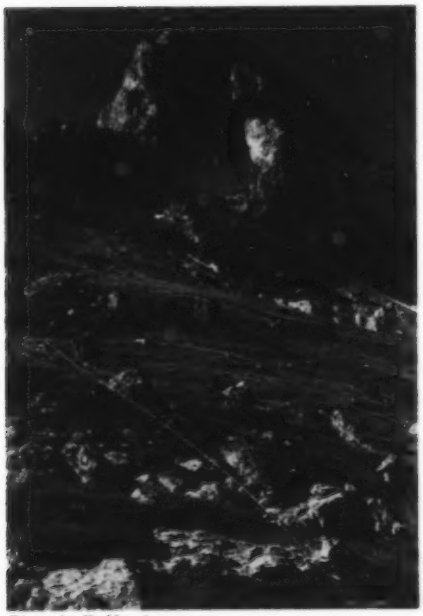
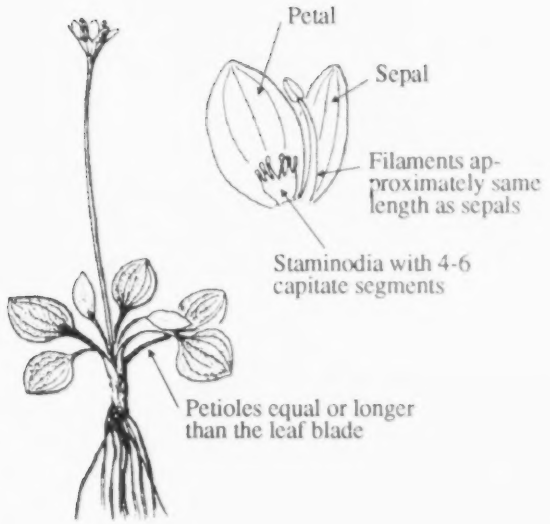


*Photo by D. Henderson*

Species
Distribution


Petal
Sepal
Filaments approximately same length as sepals
Staminodia with 4-6 capitate segments
Petioles equal or longer than the leaf blade

## *PARNASSIA KOTZEBUEI* var. *KOTZEBUEI*

**Scientific Name:** *Parnassia kotzebuei* Cham. var. *kotzebuei*

**Common Name:** Kotzebue's grass-of-parnassus

**Family (common name):** Saxifragaceae (Saxifrage Family)

**Synonyms:** None

**Global and State Rank:** G4T4/S1

**Federal Review Status:** None

**Global Distribution:** Alaska to Alberta and British Columbia, in Washington, Idaho, Montana, Wyoming and Nevada; also in northeastern North America, Labrador, and the Gaspe Peninsula to Greenland; Asia.

**State Distribution:** Custer County

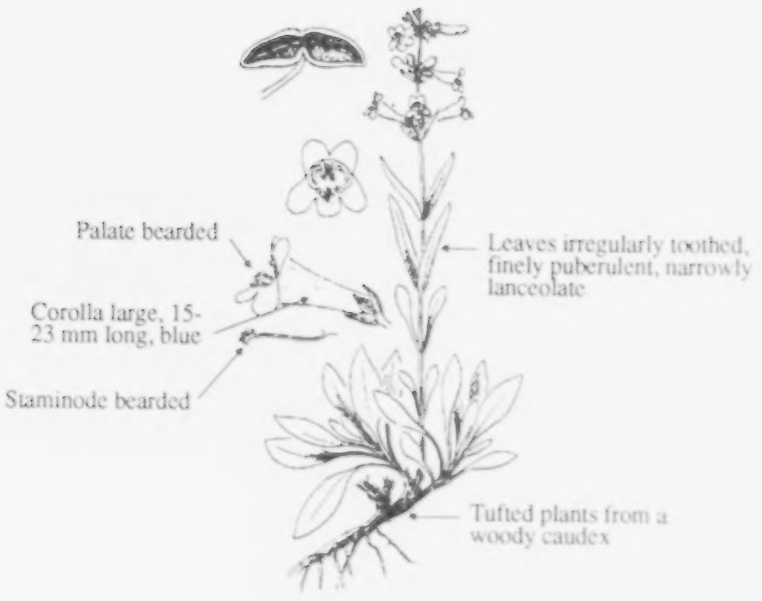
**Ownership:** USDA FS

**National Forest:** Challis

**Habitat:** Moist rock ledges, and crevices in subalpine and alpine zones. Late July-August.

*Photo by B. Moseley*

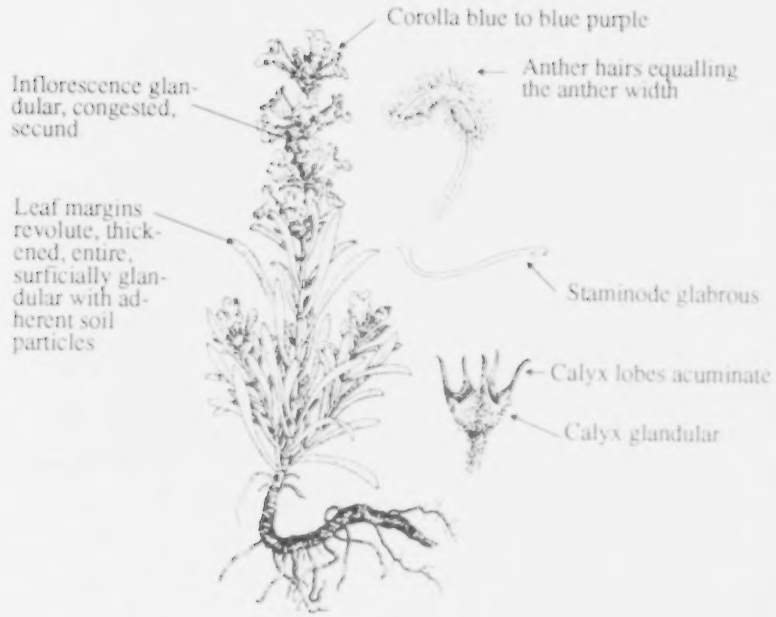
Species
Distribution


Palate bearded
Corolla large, 15-23 mm long, blue
Staminode bearded
Leaves irregularly toothed, finely puberulent, narrowly lanceolate
Tufted plants from a woody caudex

## *PENSTEMON ELEGANTULUS*

**Scientific Name:** *Penstemon elegantulus* Pennell
**Common Name:** Lovely penstemon or Elegant penstemon
**Family (common name):** Scrophulariaceae (Figwort Family)
**Synonyms:** None
**Global and State Rank:** G4/S1
**Federal Review Status:** 3C
**Global Distribution:** North-central Idaho
**State Distribution:** Idaho and Nez Perce counties
**Ownership:** USDA FS and private
**National Forest:** Payette
**Habitat:** Mid-elevation to subalpine non-forested openings in grasslands or at the edge near cliffs in granitic soils. May-June.

Species
Distribution


Corolla blue to blue purple
Anther hairs equalling the anther width
Inflorescence glandular, congested, secund
Leaf margins revolute, thickened, entire, surficially glandular with adherent soil particles
Staminode glabrous
Calyx lobes acuminate
Calyx glandular

## *PENSTEMON IDAHOENSIS*

**Scientific Name:** *Penstemon idahoensis* Atwood & Welsh

**Common Name:** Idaho penstemon

**Family (common name):** Scrophulariaceae (Figwort Family)

**Synonyms:** None

**Global and State Rank:** G1/S1

**Federal Review Status:** PC2

**Global Distribution:** Northwestern Utah and southcentral Idaho

**State Distribution:** Cassia County

**Ownership:** USDA FS, BLM, and private

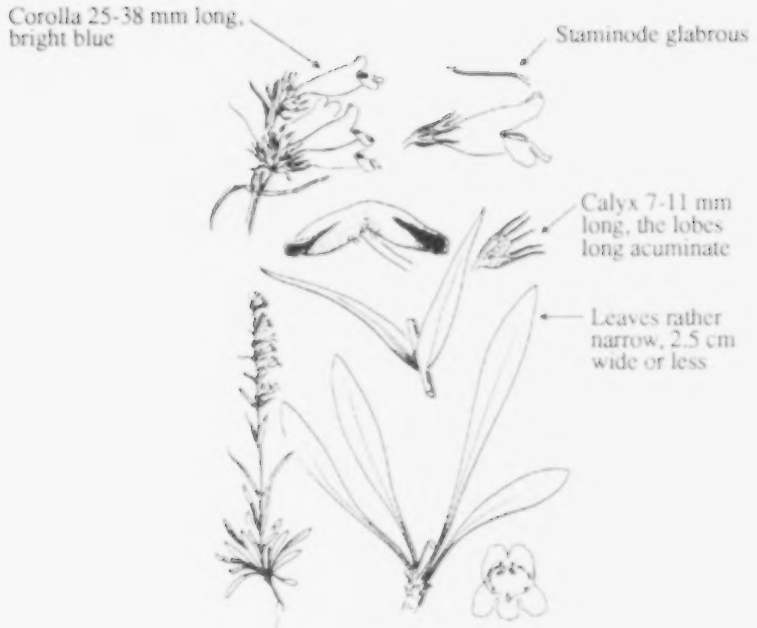
**National Forest:** Sawtooth

**Habitat:** Tuffaceous outcrops of the Tertiary Salt Lake Formation between 5250 to 5700 feet elevation growing with Utah Juniper, bitterbrush, and bluebunch wheatgrass. Late June-July.

*Photo by D. Atwood*

*Photo by D. Atwood*

Species
Distribution


Corolla 25-38 mm long, bright blue
Staminode glabrous
Calyx 7-11 mm long, the lobes long acuminate
Leaves rather narrow, 2.5 cm wide or less

***PENSTEMON LEMHIENSIS***

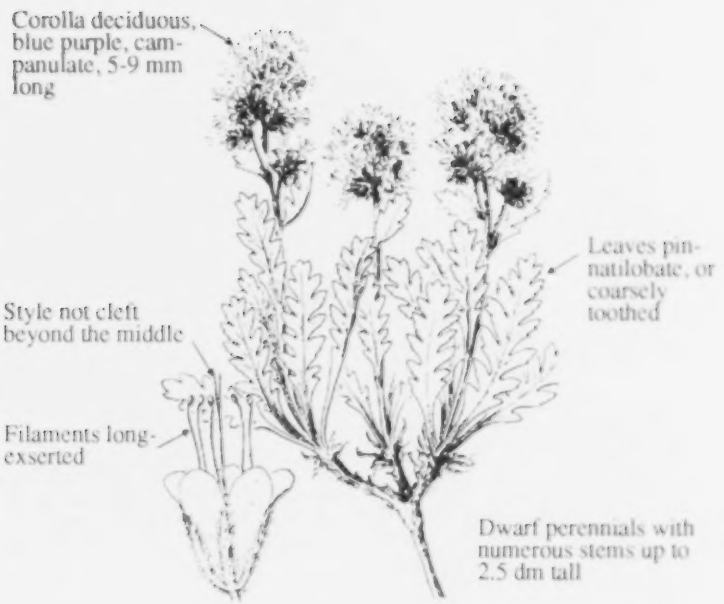
---

**Scientific Name:** *Penstemon lemhiensis* (Keck) Keck & Cronquist
**Common Name:** Lemhi penstemon
**Family (common name):** Scrophulariaceae (Figwort Family)
**Synonyms:** None
**Global and State Rank:** G3/S2
**Federal Review Status:** C2
**Global Distribution:** East-central Idaho and adjacent Montana
**State Distribution:** Lemhi County
**Ownership:** USDA FS and BLM
**National Forest:** Salmon
**Habitat:** Grassland and open ponderosa pine forests between 6,300 to 7,200 feet elevation. June-July.

*Photo by S. Shelly*

*Photo by S. Shelly*

Species Distribution


Corolla deciduous, blue purple, campanulate, 5-9 mm long
Leaves pinnatilobate, or coarsely toothed
Style not cleft beyond the middle
Filaments long-exserted
Dwarf perennials with numerous stems up to 2.5 dm tall

## *PHACELIA LYALLII*

**Scientific Name:** *Phacelia lyallii* (Gray) Rydb.

**Common Name:** Lyall's phacelia

**Family (common name):** Hydrophyllaceae (Waterleaf Family)

**Synonyms:** *Phacelia sericea* (Grah.) Gray var. *lyallii* Gray, *Phacelia sericea* (Grah.) Gray ssp. *lyallii* Brand

**Global and State Rank:** G2/S1

**Federal Review Status:** None

**Global Distribution:** Southern Canadian Rockies south to Montana and east-central Idaho

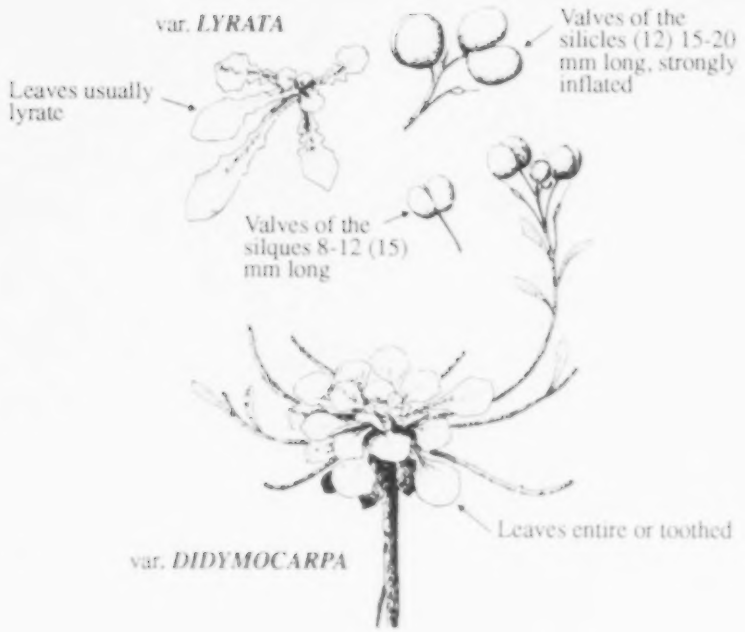
**State Distribution:** Lemhi County

**Ownership:** USDA FS

**National Forest:** Salmon

**Habitat:** Talus slopes and rock crevices at high elevations, often above timberline. July-August.

Species
Distribution


var. LYRATA
Valves of the silicles (12) 15-20 mm long, strongly inflated
Leaves usually lyrate
Valves of the silques 8-12 (15) mm long
Leaves entire or toothed
var. DIDYMOCARPA

*PHYSARIA DIDYMOCARPA*

---

**Scientific Name:** *Physaria didymocarpa* (Hook.) Gray var. *lyrata* C. L. Hitchc.

**Common Name:** Salmon twin bladderpod

**Family (common name):** Brassicaceae (Mustard Family)

**Synonyms:** *Physaria alpestris* Suksd. var. *lyrata*

**Global and State Rank:** GST1/S1

**Federal Review Status:** C2

**Global Distribution:** East-central Idaho

**State Distribution:** Custer and Lemhi Counties

**Ownership:** USDA FS? and BLM

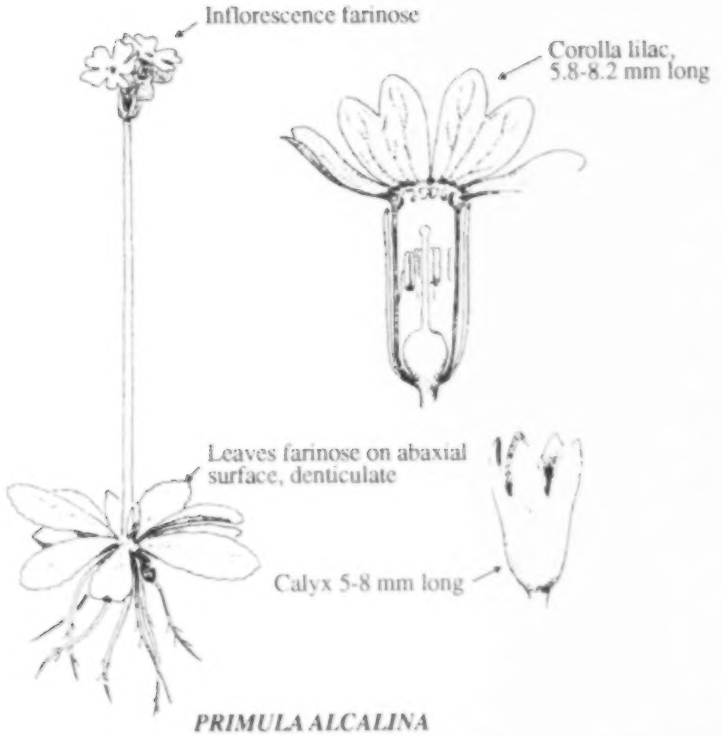
**National Forest:** Salmon?

**Habitat:** Scabland, shale banks, talus slopes, and gravelly soil about 4,050 to 4,600 feet elevation. June-August.

*Photo by R. Rosentreter*

*Photo by R. Rosentreter*

Species
Distribution




***PRIMULA ALCALINA***

---

**Scientific Name:** *Primula alcalina* A. Cholewa & D. Henderson
**Common Name:** Alkali primrose
**Family (common name):** Primulaceae (Primrose Family)
**Synonyms:** None
**Global and State Rank:** G1/S1
**Federal Review Status:** PC2
**Global Distribution:** East-central Idaho; extirpated from Montana
**State Distribution:** Clark, Custer, and Lemhi counties
**Ownership:** USDA FS
**National Forest:** Targhee
**Habitat:** Moist meadows. June.

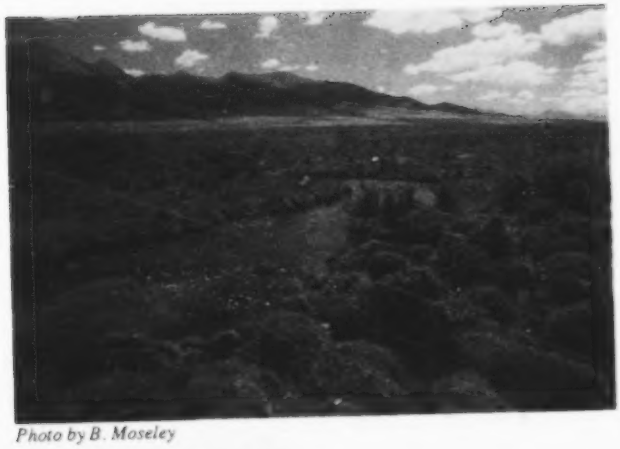
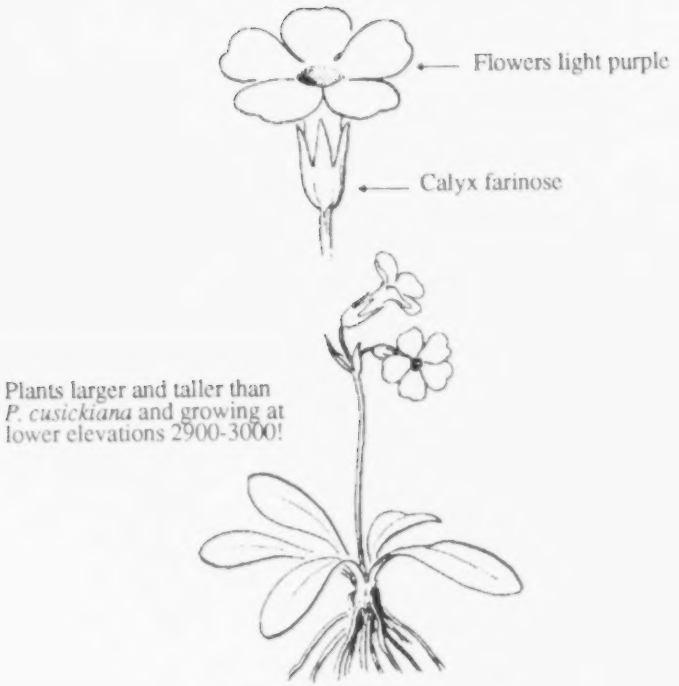


*Photo by B. Moseley*

*Photo by D. Henderson*

Species
Distribution




*PRIMULA WILCOXIANA*

---

**Scientific Name:** *Primula wilcoxiana* sp. nov.

**Common Name:** Wilcox's primrose

**Family (common name):** Primulaceae (Primrose Family)

**Synonyms:** None

**Global and State Rank:** G2Q/S2

**Federal Review Status:** C2

**Global Distribution:** Southwestern Idaho

**State Distribution:** Ada and Elmore counties

**Ownership:** USDA FS, BLM, private and probably state

**National Forest:** Boise

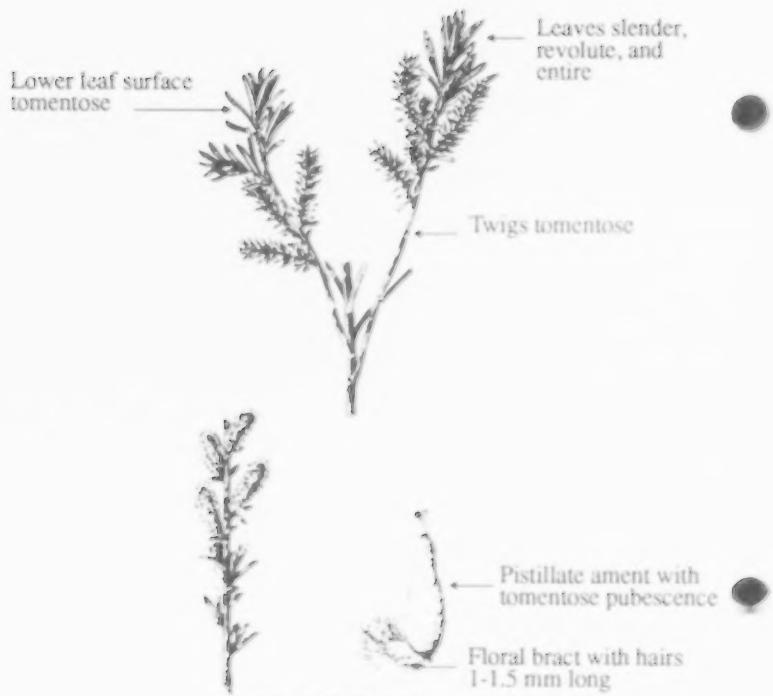
**Habitat:** Moist, north-facing, often steep hillsides associated with big sagebrush and Idaho fescue in rich loamy soil at 2,900 to 3,000 elevation. April-May.

More data is needed before this species can be described.

*Photo by D. Atwood*

*Photo by J. Duft*

Species
Distribution


Leaves slender, revolute, and entire
Lower leaf surface tomentose
Twigs tomentose
Pistillate ament with tomentose pubescence
Floral bract with hairs 1-1.5 mm long

*SALIX CANDIDA*

---

**Scientific Name:** *Salix candida* Fluegge ex Willd.

**Common Name:** Hoary willow

**Family (common name):** Salicaceae (Willow Family)

**Synonyms:** *Salix candidula* Nieuwl., *Salix candida* var. *denudata* Anderss.

**Global and State Rank:** G5/S1

**Federal Review Status:** None

**Global Distribution:** Labordor to Arkansas, south to New Jersey, Indiana, South Dakota and in the mountains to Colorado, Idaho, and southern British Columbia.

**State Distribution:** Bonner, Caribou, and Lemhi counties

**Ownership:** USDA FS, BLM, and private

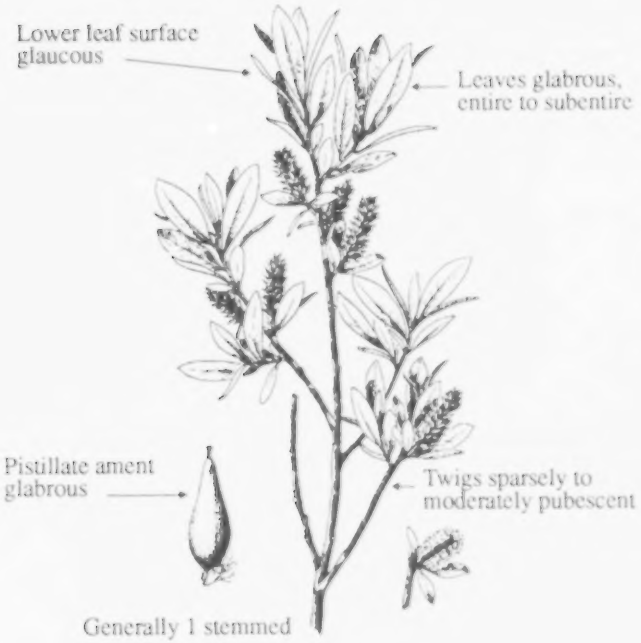
**National Forest:** Targhee

**Habitat:** Bogs and swampy places. June-August.

*Photo by B. Moseley*

*Photo by B. Moseley*

Species
Distribution


Lower leaf surface glaucous
Leaves glabrous, entire to subentire
Pistillate ament glabrous
Twigs sparsely to moderately pubescent
Generally 1 stemmed

*SALIX FARRIAE*

---

**Scientific Name:** *Salix farriae* Ball

**Common Name:** Farr's willow

**Family (common name):** Salicaceae (Willow Family)

**Synonyms:** None

**Global and State Rank:** G4/S1

**Federal Review Status:** None

**Global Distribution:** Alaska and Canada, disjunct in Montana, Wyoming, and Idaho

**State Distribution:** Custer County

**Ownership:** USDA FS

**National Forest:** Challis

**Habitat:** Moist streamsides and lakeshores between 9,000 to 9,300 feet elevation. July-August.

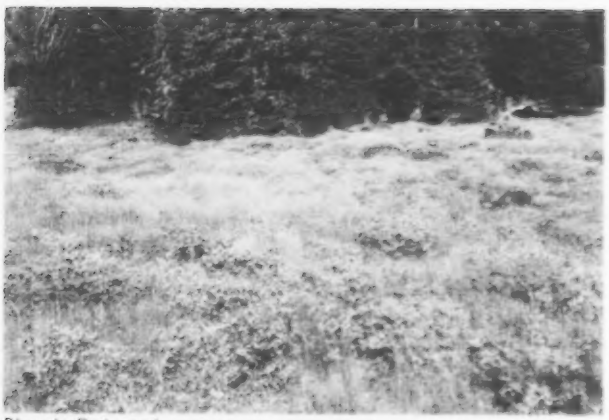
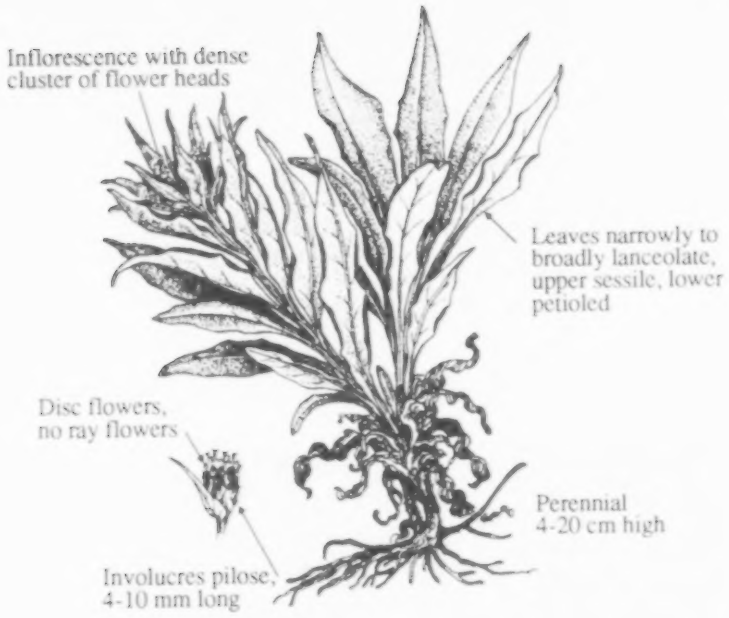


*Photo by D. Atwood*

*Photo by B. Moseley*

Species Distribution


Inflorescence with dense cluster of flower heads
Leaves narrowly to broadly lanceolate, upper sessile, lower petioled
Disc flowers, no ray flowers
Perennial 4-20 cm high
Involucres pilose, 4-10 mm long

## *SAUSSUREA WEBERII*

**Scientific Name:** *Saussurea weberii* Hulten

**Common Name:** Weber's saussurea

**Family (common name):** Asteraceae (Aster Family)

**Synonyms:** *Saussurea alpina* DC., *Saussurea densa* (Hook.) Rydb.

**Global and State Rank:** G4/S1

**Federal Review Status:** 3C

**Global Distribution:** Central Colorado, west-central Wyoming and southwest Montana.

**State Distribution:** Fremont, and Sublette counties

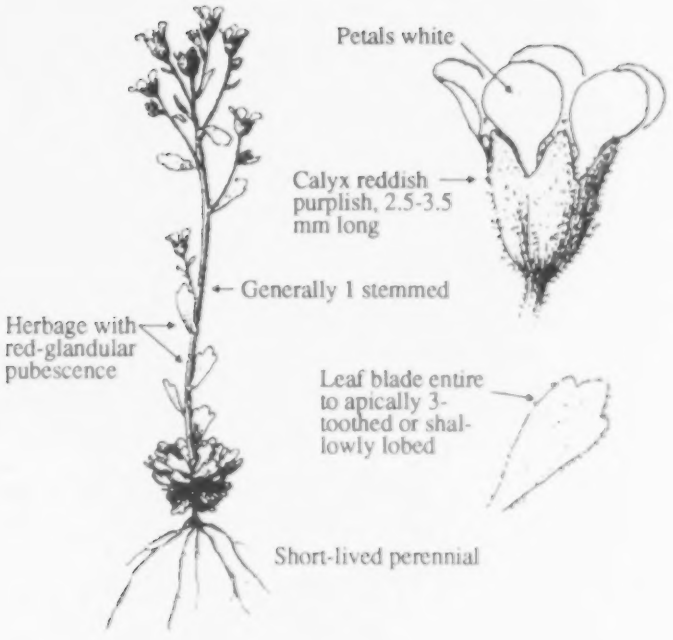
**Ownership:** USDA FS

**National Forest:** Bridger-Teton

**Habitat:** Alpine, on disturbed fellfields to stable grasslands between 10,200 to 11,200 feet elevation. Late July-August.

*Photo by H. Marriott*

Species
Distribution


Petals white
Calyx reddish purplish, 2.5-3.5 mm long
Generally 1 stemmed
Herbage with red-glandular pubescence
Leaf blade entire to apically 3-toothed or shallowly lobed
Short-lived perennial

## *SAXIFRAGA ADSCENDENS* var. *OREGONENSIS*

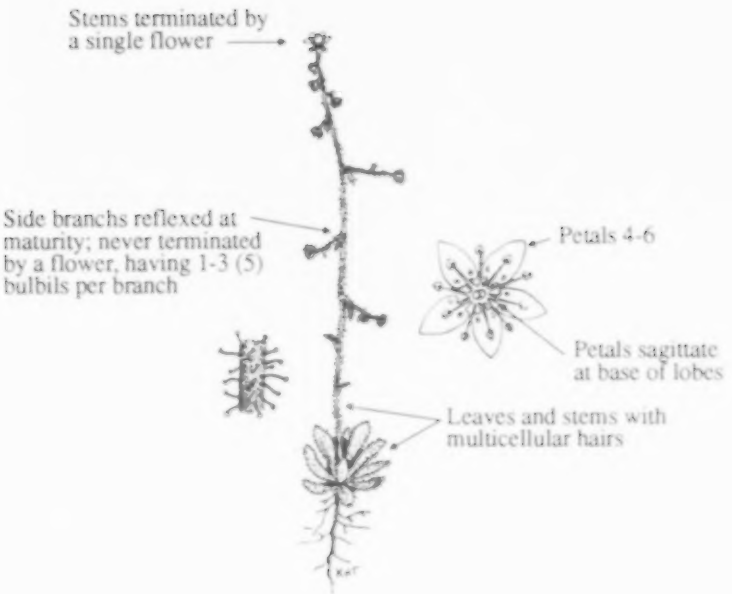
---

**Scientific Name:** *Saxifraga adscendens* L. var. *oregonensis* (Raf.) Breit.
**Common Name:** Wedge-leaf saxifrage
**Family (common name):** Saxifragaceae (Saxifrage Family)
**Synonyms:** *Saxifraga incompta* Peck
**Global and State Rank:** G4T4/S1
**Federal Review Status:** None
**Global Distribution:** Central and northern Rockies
**State Distribution:** Custer County
**Ownership:** USDA FS
**National Forest:** Challis
**Habitat:** Alpine and subalpine areas on moist ledges and in rock crevices. July-August.

*Photo by B. Moseley*

*Photo by S. Caicco*

Species
Distribution


Stems terminated by a single flower
Side branchs reflexed at maturity; never terminated by a flower, having 1-3 (5) bulbils per branch
Petals 4-6
Petals sagittate at base of lobes
Leaves and stems with multicellular hairs

## *SAXIFRAGA BRYOPHORA* var. *TOBIASIAE*

---

**Scientific Name:** *Saxifraga bryophora* A. Gray var. *tobiasiae* Grimes & Packard

**Common Name:** Tobias' saxifrage

**Family (common name):** Saxifragaceae (Saxifrage Family)

**Synonyms:** None

**Global and State Rank:** G5T1/S1

**Federal Review Status:** PC2

**Global Distribution:** Bruin Mountain, Idaho

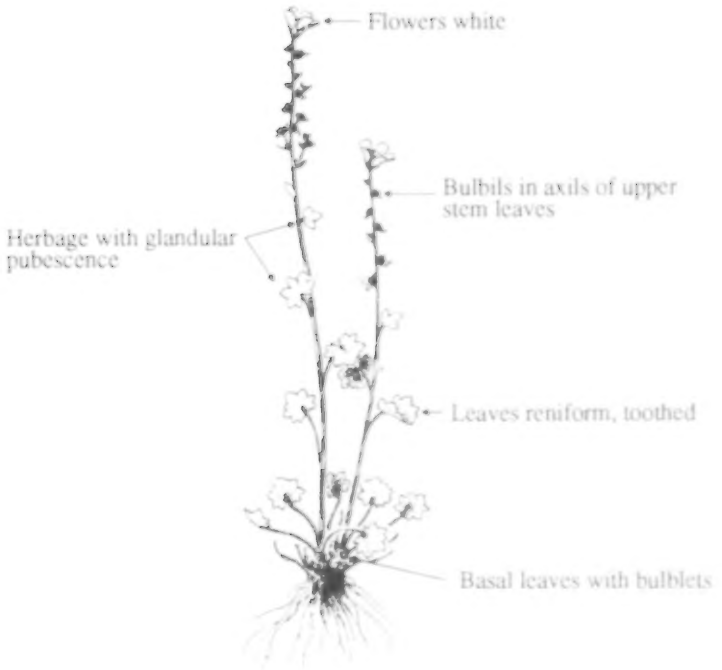
**State Distribution:** Blaine County

**Ownership:** USDA FS

**National Forest:** Payette

**Habitat:** Open rocky slopes of small terraces and on gravelly ridge tops between 7,540 to 7,650 feet elevation. July-August.

Species
Distribution


Flowers white
Bulbils in axils of upper stem leaves
Herbage with glandular pubescence
Leaves reniform, toothed
Basal leaves with bulblets

*SAXIFRAGA CERNUA*

---

**Scientific Name:** *Saxifraga cernua* L.

**Common Name:** Nodding saxifrage

**Family (common name):** Saxifragaceae (Saxifrage Family)

**Synonyms:** *Saxifraga simulata* Small

**Global and State Rank:** G4/S2

**Federal Review Status:** None

**Global Distribution:** Circumboreal, south in the Rocky Mountains to New Mexico, Idaho, and in the north Cascades of Washington.

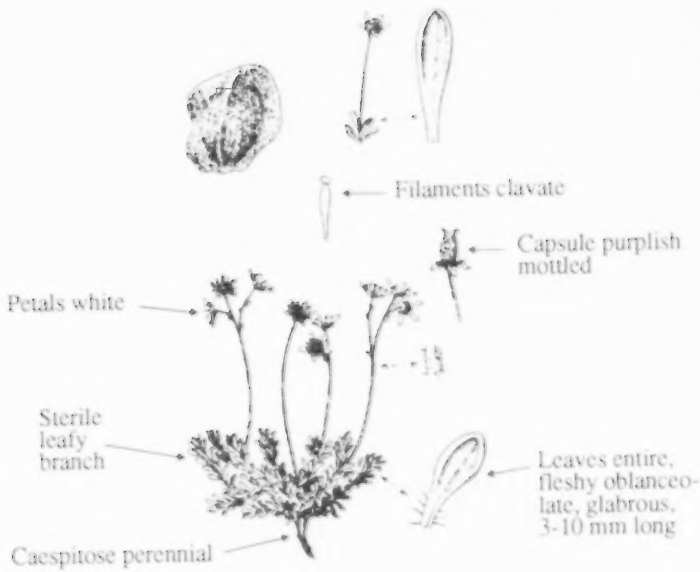
**State Distribution:** Butte, Custer, Lemhi, and Fremont counties

**Ownership:** USDA FS

**National Forest:** Challis, Targhee and Salmon

**Habitat:** Moist rock crevices and gravelly meadows over 10,000 feet in elevation. July-August.

Species
Distribution




## *SAXIFRAGA TOLMIEI* var. *LEDIFOLIA*

**Scientific Name:** *Saxifraga tolmiei* T. & G. var. *ledifolia* (Greene) Engl. & Irmsch.

**Common Name:** Tolmie's saxifrage

**Family (common name):** Saxifragaceae (Saxifrage Family)

**Synonyms:** None

**Global and State Rank:** G5T4/S4

**Federal Review Status:** None

**Global Distribution:** Montana, Oregon, California, and central Idaho

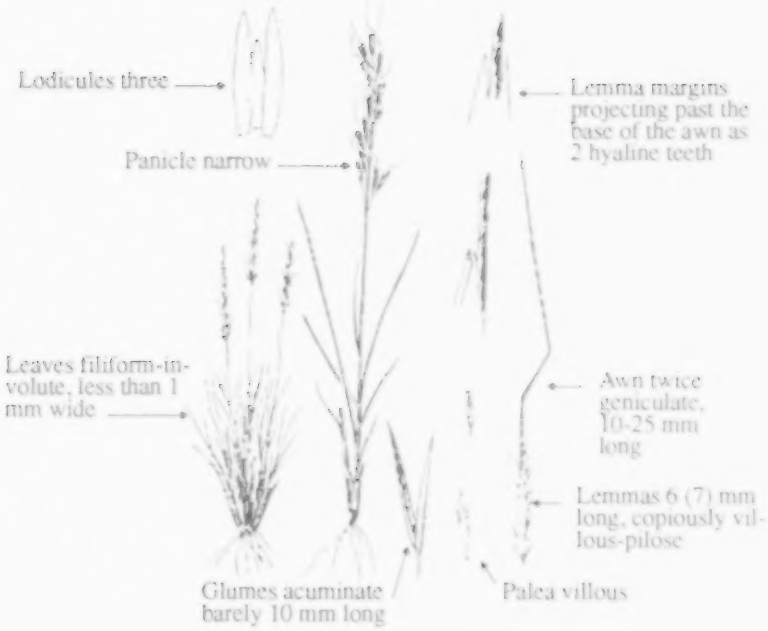
**State Distribution:** Valley County

**Ownership:** USDA FS

**National Forest:** Payette

**Habitat:** Mountain meadows, near streams or in moist alpine talus, scree, or rock crevices. June-July.

Species
Distribution


Lodicules three
Panicle narrow
Leaves filiform-involute, less than 1 mm wide
Glumes acuminate barely 10 mm long
Lemma margins projecting past the base of the awn as 2 hyaline teeth
Awn twice geniculate, 10-25 mm long
Lemmas 6 (7) mm long, copiously villous-pilose
Palea villous

***STIPA PINETORUM***

---

**Scientific Name:** *Stipa pinetorum* M. E. Jones

**Common Name:** Pine needlegrass

**Family (common name):** Poaceae (Grass Family)

**Synonyms:** None

**Global and State Rank:** G4/S1

**Federal Review Status:** None

**Global Distribution:** Oregon, Idaho, Wyoming, California, Nevada, Utah, and California

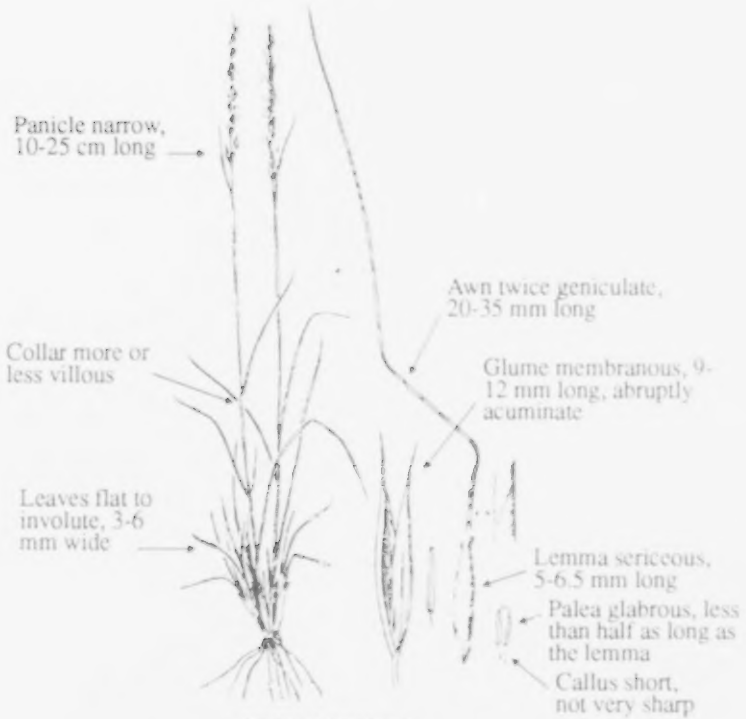
**State Distribution:** Custer County

**Ownership:** USDA FS

**National Forest:** Challis and Targhee

**Habitat:** Sagebrush to high elevations. Late June-July.

Species
Distribution


Panicle narrow, 10-25 cm long
Awn twice geniculate, 20-35 mm long
Collar more or less villous
Glume membranous, 9-12 mm long, abruptly acuminate
Leaves flat to involute, 3-6 mm wide
Lemma sericeous, 5-6.5 mm long
Palea glabrous, less than half as long as the lemma
Callus short, not very sharp

*STIPA VIRIDULA*

---

**Scientific Name:** *Stipa viridula* Trin.

**Common Name:** Green needlegrass

**Family (common name):** Poaceae (Grass Family)

**Synonyms:** *Stipa parviflora* Nutt., *Stipa parviflora* Desf., *Stipa nuttalliana* Steud.

**Global and State Rank:** G4/S1

**Federal Review Status:** None

**Global Distribution:** From British Columbia through Montana to New Mexico and Arizona, and east to Wisconsin and Illinois.

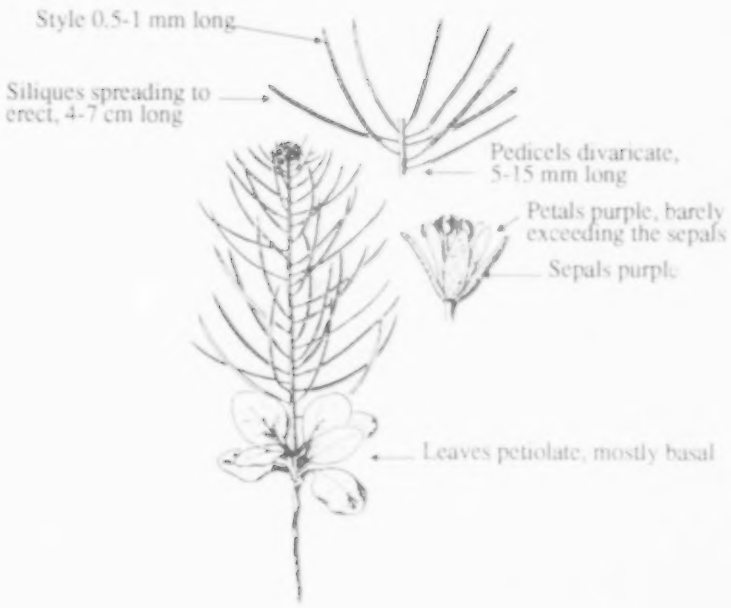
**State Distribution:** Clark, Elmore, and Owyhee counties

**Ownership:** USDA FS and BLM

**National Forest:** Targhee and Boise

**Habitat:** Grassland and sagebrush slopes. June-July

Species
Distribution


Style 0.5-1 mm long
Siliques spreading to erect, 4-7 cm long
Pedicels divaricate, 5-15 mm long
Petals purple, barely exceeding the sepals
Sepals purple
Leaves petiolate, mostly basal

*THELYPODIUM REPANDUM*

---

**Scientific Name:** *Thelypodium repandum* Rollins

**Common Name:** Wavy-leaf thelypody

**Family (common name):** Brassicaceae (Mustard Family)

**Synonyms:** None

**Global and State Rank:** G2/S2

**Federal Review Status:** C1

**Global Distribution:** Central Idaho

**State Distribution:** Custer County

**Ownership:** USDA FS, BLM, and private

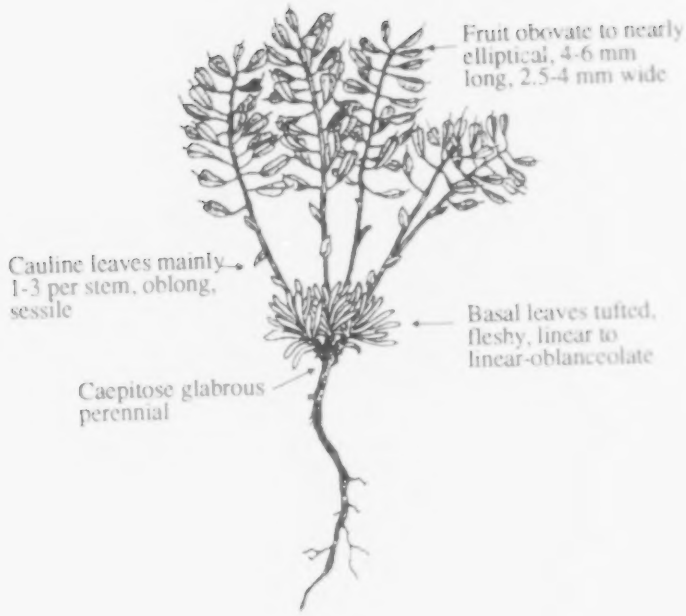
**National Forest:** Challis

**Habitat:** Steep shale banks derived from volcanic and metamorphic rocks. Associated with bunchgrasses and herbaceous perennials between 4,900 to 7,000 feet. May-September.

*Photo by D. Atwood*

*Photo by D. Henderson*

Species
Distribution


Fruit obovate to nearly elliptical, 4-6 mm long, 2.5-4 mm wide
Cauline leaves mainly 1-3 per stem, oblong, sessile
Basal leaves tufted, fleshy, linear to linear-oblanceolate
Caepitose glabrous perennial

## *THLAPSI AILEENIAE*

**Scientific Name:** *Thlapsi aileeniae* Rollins
**Common Name:** Stanley thlaspi
**Family (common name):** Brassicaceae (Mustard Family)
**Synonyms:** None
**Global and State Rank:** G3Q/S3
**Federal Review Status:** None
**Global Distribution:** Central Idaho
**State Distribution:** Custer County
**Ownership:** USDA FS
**National Forest:** Challis and Sawtooth
**Habitat:** On steep slopes on whitish sand among small rocks on sagebrush flats. May-July.

*Photo by B. Moseley*

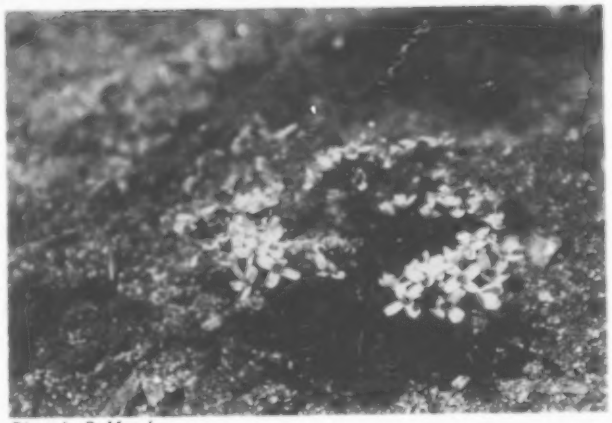
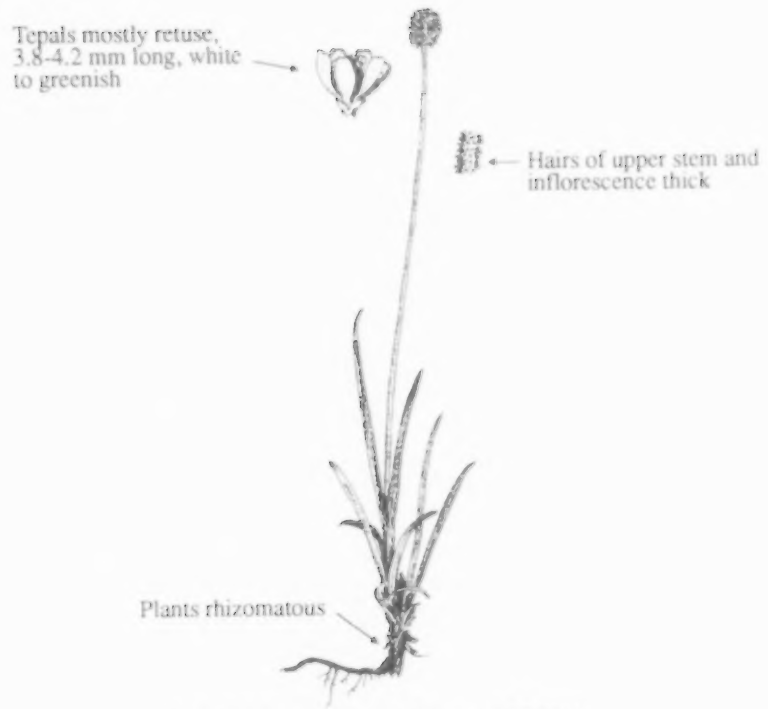


*Photo by B. Moseley*

Species Distribution




*TOFIELDIA GLUTINOSA* var. *ABSONA*

---

**Scientific Name:** *Tofieldia glutinosa* (Michx.) Pers. var. *absona* Davis

**Common Name:** Out-of-tune sticky tofieldia, Tofieldia lily

**Family (common name):** Liliaceae (Lily Family)

**Synonyms:** *Tofieldia glutinosa* ssp. *absona* C.L. Hitchc., *Tofieldia intermedia* ssp. *absona* C.L. Hitchc.

**Global and State Rank:** G5 T1/S1

**Federal Review Status:** PC2

**Global Distribution:** Northern and central Idaho

**State Distribution:** Idaho and Valley counties

**Ownership:** USDA FS, possibly state

**National Forest:** Payette

**Habitat:** Meadows, bogs, and streambanks. June-August.

*Photo by D. Atwood*

*Photo by D. Atwood*

Species Distribution

## GLOSSARY

**Abaxial** - On the side away from the axis.

**Achene** - A small dry, hard, 1-loculed, 1-seeded indehiscent fruit.

**Acuminate** - Gradually tapering to a point, the sides somewhat concave.

**Acute** - Tapering to the apex with straight sides.

**Alternate** - Borne between, not in front of, as with stamens when between the petals.

**Ament** - Catkins; a dense spike or raceme with apetalous flowers, as in the willows.

**Annual** - Plants growing from seed and producing flowers and seeds and drying the same year.

**Anther** - The pollen-bearing part of the stamen.

**Apical** - Located at the tip.

**Appendage** - A secondary attached part.

**Appressed** - Lying close and flat against another part.

**Ascending** - Growing obliquely upward, often curving.

**Auricle** - An ear shaped appendage.

**Auriculate** - With one or more auricles.

**Awn** - A bristlelike appendage, as on the tips of glumes and lemmas of many grasses.

**Axile** - Belonging to, or situated in the axis, as with a placenta situated in the axis of a pistil.

**Axis** - The central line around which organs are borne, as with the stem area supporting the inflorescence.

**Banner** - Upper petal of a papilionaceous flower, as in the sweet pea.

**Basal** - Related to, or located at the base.

**Beak** - A prolonged, usually narrowed tip of a thicker organ, as in some fruits and petals.

**Beaked** - Ending in a beak.

**Bearded** - Bearing long hairs, usually in tufts.

**Bidentate** - Having two teeth.

**Bladdery** - Thin and inflated.

**Blade** - The expanded part of a leaf or petal.

**Bract** - A reduced leaf subtending a flower, usually associated with the inflorescence.

**Bracteate** - With bracts.

**Bracteolate** - Provided with bracteoles, as at the base of a flower near the apex of a pedicel.

**Bracteole** - A small bract, especially on a floral axis; also called bractlet.

**Bractlet** - See bracteole.

**Bulb** - An underground leaf bud with thickened scales, as in the onion.

**Bulblet** - A small bulb, usually axillary and above ground.

**Caespitose** - Growing in tufts.

**Callus** - The thickened extension at the base of the lemma in some grasses.

**Calyx** - Outer whorl of flowering parts; collective term for all the sepals of a flower.

**Campanulate** - Bell shaped.

**Capitate** - Head shaped, or in a head, as the stigma of many flowers or the inflorescence of many Compositae.

**Capsule** - A dry fruit of more than 1 carpel which opens to release the seeds.

**Carpophore** - That part of the receptacle prolonged between the carpels.

**Caudex** - The woody base of an otherwise herbaceous perennial.

**Caulescent** - With a definite leafy stem.

**Cauline** - Belonging to or on the stem.

**Cespitose** - See caespitose.

**Ciliate** - Fringed with marginal hairs.

**Clasping** - Leaf partly or wholly surrounding the stem.

**Clavate** - Club shaped, gradually thickened toward the tip.

**Cleft** - Split nearly to the middle.

**Conic** - Cone shaped, with the point of attachment at the broad base.

**Contracted** - Narrowed in a particuilar place.

**Corm** - A short, bulblike, underground stem, with only papery scale leaves.

**Corolla** - Inner whorl of floral parts; collective name for petals.

**Culm** - The type of hollow or pithy slender stem found in grasses and sedges.

**Cylindric** - Elongate and circular in cross section.

**Cyme** - A flat-topped or convex paniculate flower cluster, with the central flowers opening first.

**Deciduous** - Falling off; not evergreen.

**Dentate** - Having the margins cut with sharp teeth which are not directed forward.

**Denticulate** - Minutely toothed.

**Depressed** - Low and flattened from above.

**Dilated** - Flattened and broadened, as an expanded filament.

**Disk** - A fleshy development of the receptacle about the base of an ovary; in Compositae the tubular flowers of the head as distinct from the ray flowers; also spelled disc.

**Dissected** - Deeply divided into numerous fine segments.

**Distinct** - Separate; not united with parts in the same whorl.

**Divergent** - Extending away from each other by degrees.

**Divided** - Separated to the base.

**Dorsal** - Pertaining to the back; the surface turned away from the axis.

**Dorsiventral** - Having an upper and lower surface.

**Drupe** - Fleshy fruit in which the inner layer of the ovary wall becomes hard, as in the peach.



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**Elliptic** - In the form of a flattened circle, more than twice as long as broad, widest in the center and the 2 ends equal.

**Emarginate** - With a small notch at the apex.

**Entire** - Undivided; the margin continuous, not incised or toothed.

**Erect** - Upright in relation to the ground, or sometimes perpendicular to the surface of attachment.

**Falcate** - Sickle-shaped.

**Farinose** - Covered with meallike particles as in some *Chenopodium*.

**Filament** - A thread, especially the stalk of an anther.

**Filiform** - Threadlike.

**Fleshy** - Thick and juicy; succulent.

**Flexuose** - Zigzag.

**Fruit** - The ripened pistil with all of its accessory parts.

**Geniculate** - Abruptly bent.

**Glabrous** - Without hairs.

**Gland** - A depression, protuberance, or appendage which secretes a usually sticky fluid.

**Glumes** - The pair of bracts at the base of a grass spikelet.

**Granular** - Covered with very small grains or granules; minutely mealy.

**Habitat** - The part of the environment where a plant grows.

**Herbaceous** - Pertaining to an herb; opposed to woody; having the texture or odor of a foliage leaf; dying to the ground each year.

**Hirsute** - Rough, with coarse, stiff hairs.

**Hispid** - Rough, with stiff or bristly hairs.

**Holotype** - The one specimen on which a species or taxon is based.

**Hypanthium** - A cup-shaped enlargement of the receptacle on which the calyx, corolla, and often the stamens are inserted; in perigyny, the "calyx tube".

**Inflated** - Blown up; bladdery.

**Inflorescence** - The flower cluster of a plant.

**Innate** - Borne on the apex of the support; in an anther the antithesis of adnate.

**Internode** - The portion of stem between 2 connective nodes.

**Involucel** - A secondary involucre, as the bracts subtending the secondary umbels in the Apiaceae.

**Involucre** - A whorl of bracts subtending a flower cluster, as in the heads of Compositae.

**Involute** - With the edges rolled inward toward the upper side; not revolute.

**Keel** - A prominent dorsal ridge, analogous to the keel of a boat; the two lower united petals of a papilionaceous corolla.

**Lanceolate** - Lance-shaped; much longer than broad, tapering from below the middle to the apex and to the base

**Lemma** - In grasses, the lower of the 2 bracts immediately enclosing the floret.

**Linear** - Resembling a line; long and narrow, of uniform width, as the leaf blades of grasses.

**Lobe** - A division or segment of an organ, usually rounded or obtuse.

**Lodicule** - Paired rudiments at the base of the ovary in grass flowers, which spread the palea and lemma by swelling at anthesis.

**Lyrate** - Lyre-shaped; pinnatifid, with the terminal lobe large and rounded, the lower lobes small.

**Marginate** - Distinctly margined.

**Membranous** - Of the nature of a membrane; thin, soft, and pliable.

**-merous** - A suffix denoting parts or numbers, as 3-merous.

**Mottled** - Marked with colored spots.

**Nerve** - A simple vein or slender rib of a leaf or bract.

**Node** - The joint of a stem; the point of insertion of a leaf or leaves.

**Nut** - A hard, indehiscent, usually 1-seeded fruit, produced from a compound ovary.

**Nutlet** - A small nut.

**Obcordate** - Inversely cordate, with the notch at the apex.

**Oblanceolate** - Inversely lanceolate.

**Oblique** - With unequal sides, slanting.

**Oblong** - Much longer than broad, with nearly parallel sides.

**Obovate** - Shaped like the longitudinal section of an egg, but with the broadest part toward the tip.

**Obovoid** - Inversely ovoid.

**Ochroleucous** - Yellowish white.

**Opposite** - Set against, as leaves when 2 at a node; 1 part in front of another, as a stamen in front of a petal.

**Ovary** - The part of the pistil that contains the ovules.

**Ovate** - With the outline of an egg in longitudinal section, the broadest end downward.

**Palate** - An appendage in the throat of an irregular flower partly or completely closing the throat.

**Palea** - One of the chafflike scales on the receptacle of many Compositae; the inner bract of a grass floret, often partly surrounded by the lemma.

**Palmate** - Lobed or veined where the branches arise from a common point, like the fingers of a hand.

**Panicle** - A compound racemose inflorescence.

**Pedicel** - The stalk of a single flower in a flower cluster, or of a spikelet in grasses.

**Peduncle** - The stalk of a flower or of a flower cluster.

**Pendulous** - Hanging downward; pendent.

**Perennial** - Of three or more years duration.

**Perianth** - The floral envelopes; collectively, the calyx and corolla, especially when they are alike.

**Perigynium** - The scalelike ogran surrounding the pistil in *Carex*.

**Persistent** - Remaining attached, as a calyx on the fruit.

**Petal** - One of the leaves of a corolla, usually colored.

**Petiolate** - With a petiole.

**Petiole** - A leaf stalk.

**Petiolule** - The petiole of a leaflet of a compound leaf.

**Pilose** - Bearing soft and straight spreading hairs.

**Pinnate** - A compound leaf, having leaflets arranged on each side of a common petiole; featherlike.

**Pinnatifid** - Pinnately cleft into narrow lobes not reaching the midrib.

**Pinnatlobate** - With pinnately arranged lobes.

**Pistil** - The ovule-bearing organ of a flower, consisting of stigma and ovary, usually with a style between; gynoecium.

**Pistillate** - Provided with pistils and without stamens; female.

**Plumose** - Feathery; having fine hairs on each side as a plume.

**Pod** - Any dry, dehiscent fruit, especially a legume.

**Prickle** - Sharp outgrowth of the bark or epidermis.

**Procumbent** - Trailing on the ground, but not rooting.

**Prostrate** - Lying flat upon the ground.

**Puberulent** - Minutely pubescent.

**Pubescent** - Covered with short, soft hairs; downy. Bases of hairs.

**Raceme** - A simple, elongated, indeterminate inflorescence with each flower sub-equally pedicelled.

**Ray** - A primary branch of an umbel; in Compositae, the ligule of a ray flower bearing the flowers in the head.

**Reniform** - Kidney shaped.

**Reticulate** - With a network; net veined.

**Retuse** - Notched shallowly at a rounded apex.

**Revolute** - Rolled backward from both margins toward the underside.

**Rhizomatous** - Having rhizomes.

**Rhizome** - An underground stem or rootstock, with scales at the nodes and producing leafy shoots on the upper side and roots on the lower side.

**Rosette** - A crowded cluster of radiating leaves appearing to rise from the ground.

**Rosulate** - With a collection of clustered leaves; a rosette.

**Sagittate** - Arrowhead shaped, with the basal lobes turned downward.

**Salverform** - A corolla with slender tube, abruptly expanding into a flat limb.

**Scabrous** - Rough to the touch, owing to the structure of the epidermis or to the presence of short stiff hairs.

**Scale** - Any thin, scarious bract; usually a vestigial leaf.

**Scape** - A leafless peduncle rising from the ground in acaulescent plants.

**Scapose** - With the flowers borne on a scape.

**Scurfy** - Clothed with small branlike scales.

**Sepal** - A leaf or segment of the calyx.

**Sericeous** - Silky with long, slender, soft, more or less appressed hairs.

**Serrate** - Saw-toothed, the sharp teeth pointed forward.

**Sessile** - Attached directly by the base, not stalked, as a leaf without a petiole.

**Shrub** - A woody plant smaller than a tree and with several to many stems.

**Silicle** - A short silique, typically less than twice as long as wide.

**Silique** - A many-seeded capsule of the Brassicaceae, with 2 valves splitting from the bottom and leaving the placentae with the false partition (replum) between them.

**Simple** - Unbranched, as a stem or hair; not compound, as a leaf; single, as a pistil of one carpel.

**Spike** - An elongated rachis of sessile flowers or spiklets.

**Spikelet** - A secondary spike; the ultimate flower cluster in grasses, consisting of 2 glumes and 1 or more florets, also in sedges.

**Spur** - A slender, saclike, nectariferous process from a petal or sepal.

**Stamen** - The male organ of the flower which bears pollen.

**Staminode** - A sterile stamen, or what corresponds to a stamen.

**Stellate** - Star-shaped.

**Stigma** - The receptive part of the pistil on which the pollen germinates.

**Stipitate** - With a stipe or stalk.

**Stipule** - One of the pair of usually foliaceous appendages found at the base of the petiole in many plants.

**Striate** - Marked with fine longitudinal lines or furrows.

**Strigillose** - Minutely strigose.

**Strigose** - Clothed with sharp and stiff appressed straight hairs.

**Style** - The contracted portion of the pistil between the ovary and the stigma.

**Sub-** - A prefix usually signifying somewhat, slightly, rather, or almost.

**Succulent** - Juicy; fleshy and soft.

**Tepals** - A division of the perianth, sepal, or petal, as in the Polygonceae.

**Terete** - Cylindric; round in cross section.

**Ternate** - In 3's, as a leaf consisting of 3 leaflets.

**Throat** - The orifice of a gamopetalous corolla; the expanded portion between the limb and tube proper.

**Tomentose** - With tomentum; covered with a rather short, densely matted, soft white wool.

**Tooth** - Any small marginal lobe.

**Torulose** - Constricted between the seeds.

**Tubercle** - A small tuberlike prominence or nodule; the persistent base of the style in some Cyperaceae.

**Tuberous** - Producing or resembling a tuber.

**Umbel** - A flat or convex flower cluster in which the pedicels arise from a common point, like the rays of an umbrella.

**Valve** - One of the segments into which a dehiscent capsule or legume separates.

**Vein** - A vascular bundle of a leaf or other flat organ.

**Venation** - The arrangement of the veins of a leaf; nervation.

**Villous** - Bearing long, soft, and unmatted hairs; shaggy.

**Viscid** - Sticky; glutinous.

**Wing** - A thin, usually dry extension bordering an organ; a lateral petal of a papilionaceous flower.